

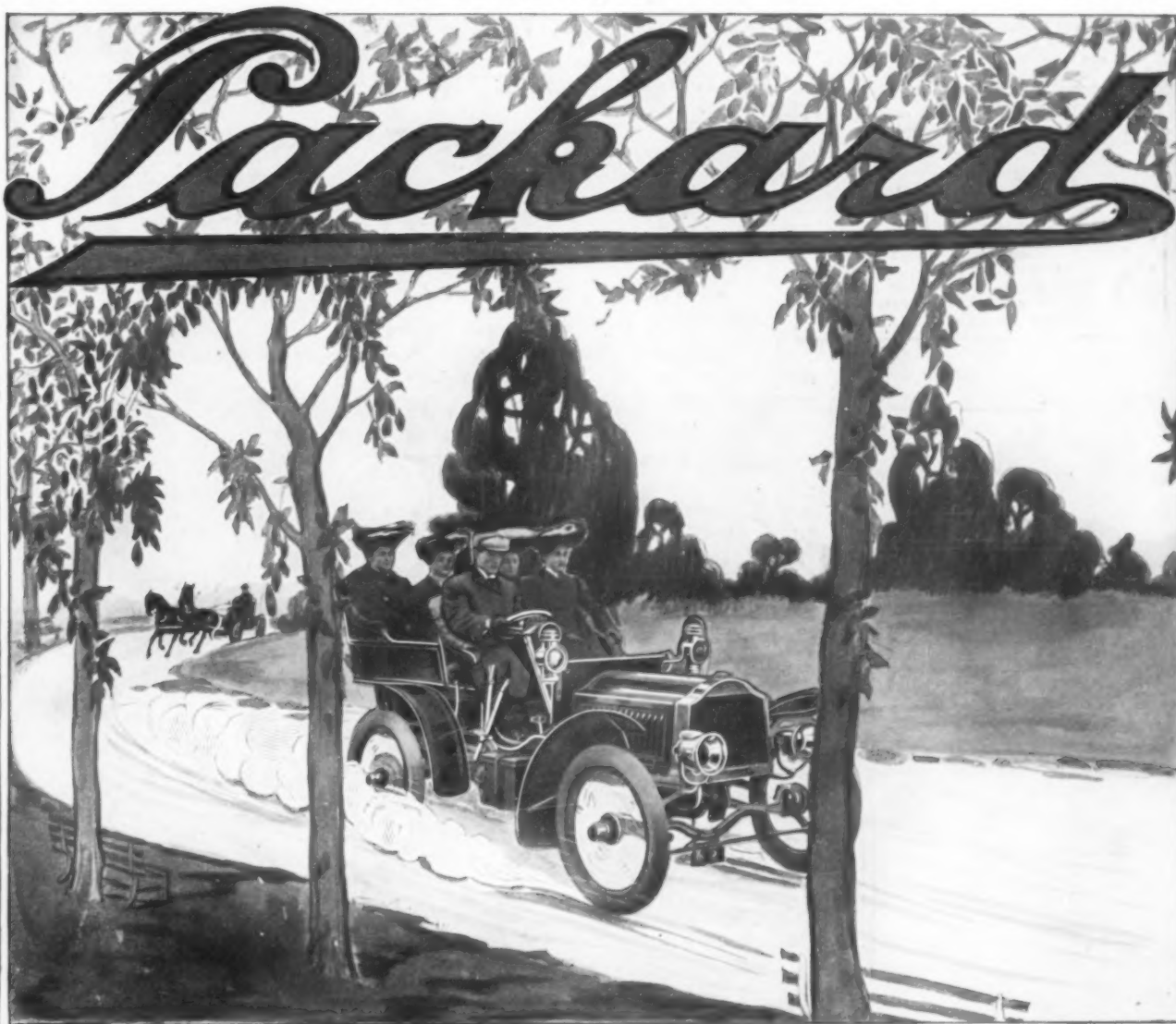
CONGRESS

THE AUTOMOBILE

WEEKLY

NEW YORK — SATURDAY, MAY 28, 1904 — CHICAGO

10 CENTS



The PACKARD ride, our agent will give you if you send us your name, will convince you of the superiority of the Four-cylinder PACKARD over other motor cars—superiority in strength and power, in comparative light weight, in speed, in smooth, quiet running, in hill-climbing powers—in fact, in every point of importance in automobile construction. Model "L" 1904, Four-cylinder PACKARD, 22 horsepower, price, \$3,000. Other models at \$1,500 to \$10,000.

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Experience counts in the making of automobile Tires. We have been making G & J Clincher Tires for ten years, and know how to make Tires that will give the best service. Use the genuine G & J Tires and get the benefit of this experience. They are high grade, reliable Tires.

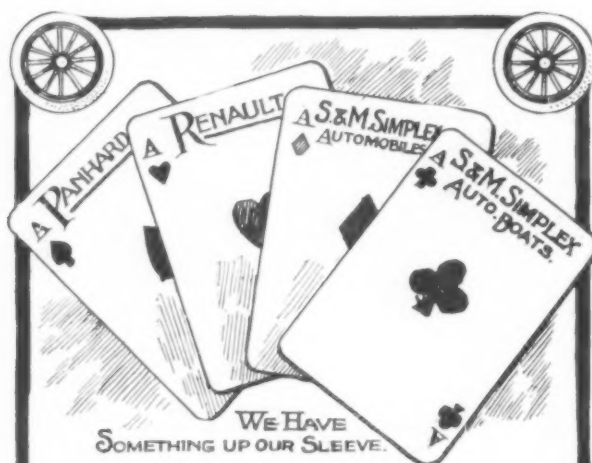


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For speed and power and loads;
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A little coupe on a long chassis
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THE DIAMOND ACE is the card we lead,
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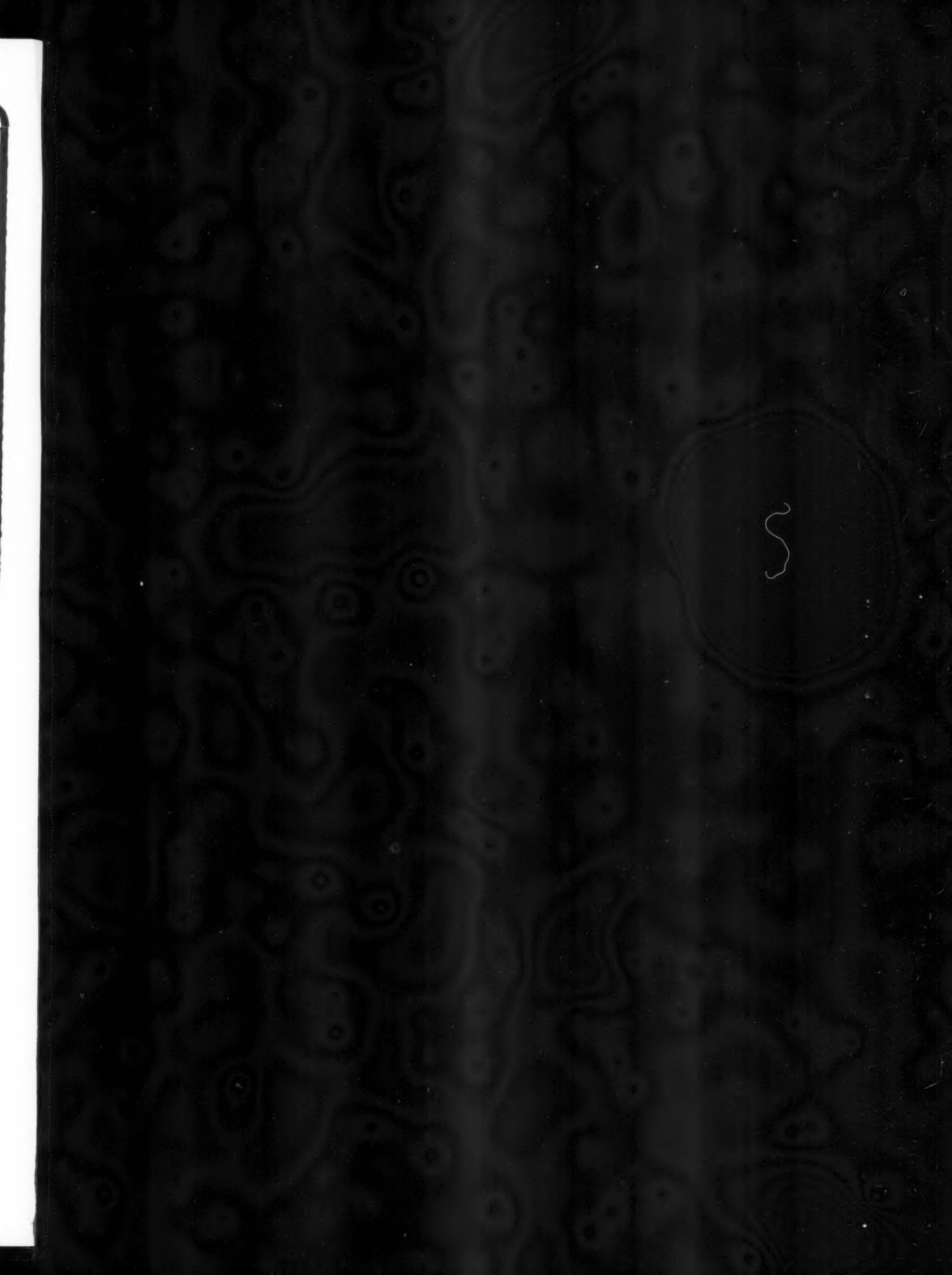
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Will be found in the boats of the raciest kind
Leading sports on land and water.

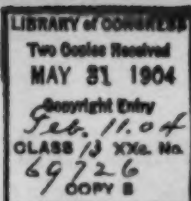
Smith & Mabley

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Members Association Licensed Automobile Manufacturers





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CHINESE PRINCE PU LUN IN INDIANAPOLIS.

Special Correspondence.

INDIANAPOLIS, May 23.—Prince Pu Lun, heir apparent to the Chinese throne, is at present the guest of this city and every attention is being shown the royal visitor. When he arrived last week, William Fortune, president of the Auto-

length serious to contemplate. Only the facilities in the way of quick transportation provided by the automobile permit the keeping of the engagements. His visits to the manufacturing plants have been made in the machine, and on Tuesday the Prince and his

mittee composed of prominent citizens of Indianapolis, headed by Mayor Holtzman, visited the factory of the G & J Tire Company. This is the only rubber factory the Prince has ever visited. He expressed himself as greatly interested in the methods of



PRINCE PU LUN GETTING ABOARD THOMAS CAR IN INDIANAPOLIS TO VISIT VARIOUS LOCAL INDUSTRIAL PLANTS.

mobile Club of Indianapolis, placed himself and his new touring car at the disposal of the Prince. The Prince's plans contemplated visits to the leading industrial plants of the city, while the arrangements of the business men and the society women for his entertainment comprised a programme of a

party will be taken by members of the automobile club for a ride to Lafayette, Ind., returning Wednesday, the round trip covering 150 miles.

Last Saturday Prince Pu Lun, accompanied by Wong Kai Kah, commissioner to the World's Fair from China, and a com-

tire manufacture and the general arrangement of the plant. The Prince is making a special study of American factories, with the intention of introducing Western ideas and methods into his own country.

On the same day he was the guest of Hugh McGowan, president of the Indian-

apolis Terminal & Traction Company. He was taken in an automobile to Fairview Park, about five miles north of the city, where the Prince enjoyed the performance of King and Queen, Mr. McGowan's two snowy white driving horses. On the return trip the party visited the Country Club and he tried his hand at the national game of Scotland, making a short trip over the golf links.

The purpose of the trip to Lafayette is to visit Purdue University, where a public reception is to be given on Tuesday evening. Twenty-five automobiles are expected to go on the run, each with a full quota of passengers. They are scheduled to leave Indianapolis at 9.45 a. m., the start being made from the Columbia Club, facing the Indiana Soldiers and Sailors' Monument. The route is north from Indianapolis over the old Michigan road to Kirklin, Ind., and from there west to Frankfort, where luncheon will be served. From Frankfort the route is directly northwest to Lafayette. The return will be south to Crawfordsville and southeast to Indianapolis.

Gordon L. Varney, secretary of the automobile club, and Carl G. Fisher, a local dealer, are to ride in a pilot car about twenty minutes ahead of the procession scattering confetti to mark the turns. Red flags will indicate bad holes and difficult turns in the course.

MAYOR JOHNSON TO LEAD.

Accepts Invitation to Act as Grand Marshal of Parade in Cleveland.

Special Correspondence.

CLEVELAND, May 23.—Mayor Tom L. Johnson has accepted the invitation to act as grand marshal and lead the parade on Automobile Day, June 8, provided business does not call him out of town at that time. The procession will start at Perry street and Euclid avenue instead of at the Public Square, as formerly planned, thus making it shorter. For a time it looked as if the parade might have to be given up as a failure of the day, owing to the objections of many women who had intended to decorate their cars and appear in white, but so many operators have agreed to join the parade that it now looks as if the number of machines in line would be greater than was anticipated.

The intention is to divide the parade into four sections—gasoline, steam, electric and commercial vehicles. Arrangements have been made to have police officers lead the procession in touring cars, while bands will occupy two large vans. The commercial vehicles will not be permitted to carry advertising banners or signs other than those already painted on them.

A braking test has been added to the other special events previously announced.

More than half a hundred society women have signified their intention of taking part in the floral pageant.

Chicago Automobile Club Parade.

President John Farson Leads a Monster Demonstration of Pleasure and Commercial Vehicles—Many Distinguished Guests.

Special Correspondence.

CHICAGO, May 21.—The Chicago Automobile Club builded better than it knew when it inaugurated its campaign of education by the automobile parade given to-day. Even those in charge were surprised at the generous response of the motorists to their request to turn out and show the people that the automobile is already taking the place of the horse for both pleasure driving and business use.

There were 228 vehicles of all kinds officially in the parade, while perhaps 100 more dropped into line after the parade had passed through the downtown district. The route covered was about eight miles long and the parade lasted only a little over an hour.

EVENT A GREAT SUCCESS.

The weather was ideal and everything worked together to make the event successful. The clubhouse at 243 Michigan boulevard was decorated as it never was before and the bright-colored streamers and waving flags gave an air of festivity that helped much to arouse and sustain the enthusiasm of the members and their guests. The entire front of the clubhouse was artistically decorated with bunting in the club colors of purple and gold, with American flags intertwined. A large picture of President John Farson, draped with flags, was placed in the center of the porch, where it could be plainly seen from the street. Potted plants and cut flowers were distributed in profusion throughout the house, on the porches and in the yard. A crowd of more than 2,000 spectators gathered in Lake Front Park, opposite the clubhouse, and sat on the grass watching the assembling of the cars, while the sidewalks all along the line of the parade were crowded with sightseers. Every morning paper to-day and all the evening papers yesterday devoted liberal space to an announcement of the affair, and the publicity given it was reflected by the number of people out to see the first event of its kind in Chicago.

Shortly after 1 o'clock the Naval Reserve Band of twelve pieces began to play in front of the clubhouse and soon the cars began to stream in. The time of departure was set for 2:30 o'clock, and promptly on the minute the first car left.

Leading the procession was President John Farson in his Winton, with Mayor Harrison and Henry G. Foreman, president of the South Park Board of Commissioners, as his guests. Following this car was Jerome A. Ellis, with his 40-horsepower Aperson, decorated with red carnations and filled with aldermen. Director F. C. Donald, Pope-Toledo, came third with another consignment of aldermen. Next in line, and in startling contrast to the handsomely dec-

orated touring cars, was the five-ton electric truck of Montgomery Ward & Co., carrying the band, the members of which played strenuously, occasionally losing a note as they bumped over the rough spots on some of the streets paved with granite blocks.

The first division, consisting of American and foreign touring cars, was in charge of Jerome A. Ellis as marshal. There were about forty cars in this division, most of them of American manufacture. The second division, of gasoline light cars, was in charge of Walter L. Githens, and comprised about sixty vehicles. The third division, with Andrew J. McDuffie marshal, included about twenty steam vehicles; the fourth division, W. R. Mason marshal, embraced about sixty electrics, while the fifth and last division, commercial vehicles, in charge of J. B. Burdette, consisted of nearly fifty cars of various types and sizes, including express wagons, furniture vans, brewery wagons and light delivery wagons, all self-propelled.

The route was down Michigan avenue to Jackson, west about three miles to Ashland avenue and back on Jackson boulevard to the lake, past the clubhouse and south on Michigan avenue to Thirty-fifth street, returning on Michigan to the clubhouse.

At the conclusion of the run the members and guests assembled in the club parlors, where a luncheon was served. A happy feature of the day was the presentation, at this time, of a magnificent portfolio of views taken on the last club run, to President Farson. Several of these pictures were of the club members at the house and in the grounds of the president's Oak Park home. The presentation speech was made by Director F. C. Donald in behalf of the board of directors.

OBJECT OF THE PARADE.

The avowed object of the club in giving the parade was to show the growth of automobiling and the ease and certainty with which the motor car is controlled, with which laudable purpose in view a large number of aldermen were taken along as guests. Among these was Alderman Badenoch, whose conversion from a motor hater to a motor fiend was sudden and remarkable. Alderman Badenoch has been one of the conspicuous figures in the city council opposed to the automobile. He had never ridden in one and he was decidedly of the opinion that eight miles an hour was fast enough for an automobile to travel. In the parade Badenoch was the guest of Jerome Ellis and it was decided to initiate him thoroughly. The big car was given a few short spurts with quick stops within a few inches of the car in front and put through several other stunts calculated to induce heart failure, the alderman meanwhile sit-

ting gingerly on the edge of the seat, his face set with fear. When at last he saw the certainty with which the car was controlled he began to regain his nerve, and at last to enjoy the ride. Speaking to THE AUTOMOBILE representative after the parade he said:

"The ride to-day was a revelation to me. I have never ridden in an automobile before and did not realize how a skilful driver could control his machine. I can see now why automobilists complain against a speed limit of eight or ten miles an hour, and after this you may say that I am in sympathy with them. I am in favor now of raising that limit considerably, and before I say how high, I am going to have Mr. Ellis take me for another ride, so that I can learn what fast riding really is. I have always been opposed to the automobile, but since the ride to-day I have completely changed

Elbridge Haney; the mayors and members of the councils of Evanston, Kenilworth, Wilmette, Winnetka, Glencoe and Highland Park, all suburban towns along the shore of Lake Michigan north of Chicago; editors of the Rockford, Ill., *Star, Gazette* and *Republican*, the Urbana, Ill., *Herald*, and the Champaign, Ill., *Times*; Emerson S. Brooks, of the Automobile Club of America, New York, and, among prominent Chicagoans, Charles S. Deneen, district attorney; Victor F. Lawson, president of the Associated Press; James H. Eckles, ex-comptroller of United States currency; William R. Harper, president of the University of Chicago; Rev. Frank W. Gunsaulus, United States Senator Shelby M. Cullum and Joseph G. Cannon; George Ade, John T. McCutcheon and Ralph Wilder, playwright and humorist and cartoonists; Edgar B. Tolman, Frank O. Lowden, Granville W. Browning, F. W.

in the large ballroom on the second floor. The Evanston Boat Club, which has been secured for the summer as a country station, is situated at the end of Greenleaf street on the lake front. It is fourteen miles from the clubhouse at 243 Michigan avenue and the run can be made in about forty minutes without fear of arrest by the police. The clubhouse is a handsome three-story building, erected at a cost of \$50,000, and will make an ideal country club. It has a large reception room, office and dining room on the first floor, a dance hall on the second floor and sleeping rooms on the third floor. A bowling alley and swimming pool are in the basement. The broad piazzas are only a few feet from the lake, offering a cool and pleasant retreat, where the members may listen to the lapping of the waves as its music mingles with the strains from the Evanston band a short distance away.



CARS ASSEMBLING IN FRONT OF CHICAGO AUTOMOBILE CLUB HOUSE ON MICHIGAN AVENUE TO TAKE PART IN PARADE.

my mind. I think the best and quickest way to convert the lawmakers of the country to a reasonable and sensible view of automobiling is to give them a few rides and show them that automobiling is not as dangerous as it looks to the uninitiated."

Chief of Police O'Neil, who was a guest in one of the cars at the head of the procession, was delighted, and when the speed limit was exceeded slightly he raised no particular objection.

LIST OF PROMINENT GUESTS.

The names of many prominent persons will be recognized in the list of invited guests that follows:

Governor Richard Yates, of Illinois, from Springfield; Mayor Carter H. Harrison, of Chicago, and members of the City Council; Chief of Police Francis O'Neill, of Chicago; Judges P. S. Grosscup, C. C. Kohlsaat, and

Coyne, W. W. Tracy, Henry G. Foreman, Frederick A. Bangs and Arthur Caton.

COUNTRY CLUB OPENING.

Chicago Club to Hold House Warming in Evanston Boat Club May 28.

Special Correspondence.

CHICAGO, May 23.—Inspired by the success of the automobile parade last Saturday, the Chicago Automobile Club is preparing to make the opening of its country club station at Evanston on Saturday, May 28, one of the events in club annals.

The opening will be a genuine, old-fashioned house warming, and the members will do all in their power to give their friends and guests a hearty welcome. An elaborate dinner will be served at 6 o'clock and the evening will be spent in dancing

The drive from one clubhouse to the other is along Sheridan Road, the most beautiful drive in Chicago, with magnificent homes on one side and the broad expanse of lake on the other. The members of the club are enthusiastic over their acquisition, and the Evanston station promises to be the objective of the most popular run during the warm summer evenings. The large dining hall will seat 200 persons comfortably, while the ballroom will add extra inducement to spend the evenings there.

An amendment to the by-laws of the C. A. C. passed at a meeting last week permits members of the Evanston Boat Club to become members of the C. A. C. under a special membership and they may avail themselves of the privileges of the Evanston clubhouse.

The club at its last meeting also voted

to raise the membership limit from 300 to 400, as there are now more than 300 members, including those on the waiting list.

Owing to the largely increased membership of the club, it has become necessary to provide larger garage accommodations, and a part of the Dan Canary garage has been rented for the use of members. This is only half a block from the club garage and is convenient to the clubhouse on Michigan avenue.

A MUNICIPAL AUTO RIDE.

**Mayor Fobes of Syracuse Gives Department Heads and Aldermen
—a Novel Outing.**

Special Correspondence.

SYRACUSE, May 23.—Mayor Alan C. Fobes tendered the heads of the various City Hall departments and the members of the common council a complimentary automobile ride last Friday to a summer resort on Oneida Lake, about eleven miles from Syracuse, in a dozen cars, varying in size from a Peerless touring car to an Oldsmobile runabout. Some of the officials expressed the fear before starting that it was to be a "hurry-up" ride, but that did not deter any of them from taking seats in the machines when they lined up in front of the City Hall about 4 o'clock in the afternoon.

There was plenty of racing spirit and more than one driver made up his mind to be first at the hotel on the lake. All arrived within forty minutes after the start, despite some bad roads. The Mayor, Superintendent of Schools A. B. Blodgett, and George L. Baldwin made the trip in a horse drawn buggy, as the automobile in which they were to ride failed to appear. Three newspaper men failed to reach the lake owing to an accident to their car that could not be repaired on the road.

An excellent dinner, enlivened with ringing speeches, was served at the lake. The run back to the city was made without mishap.

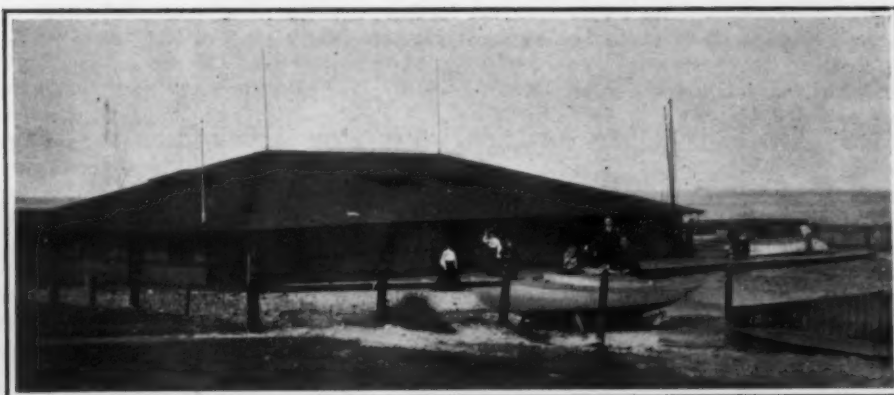
This was the first automobile experience for many of the guests, and as a result of Mayor Fobes' entertainment the motor car has gained many valuable friends. Just now it would be hard to get an automobilist punished for minor infractions of the speed regulations in Syracuse, even if he offended within the sacred half-mile zone around the center of the city.

The list of drivers of the cars and their passengers follows:

H. C. Pierce.—Commissioner of Public Safety R. S. Bowen, City Treasurer Frank W. Traugott, President of the Board of Assessors Henry Reimers, and Alderman Walter Hincley.

Clarence West.—Alderman J. H. Ormsbee, W. W. Crossett, I. C. Davis and H. H. Lincoln.

H. H. Franklin.—Superintendent of Water Bureau John T. Delany, Assistant City Clerk Andred Zinsmeister, and Charles A. Smith.



BOAT HOUSE ON LAKE MICHIGAN, LEASED BY CHICAGO AUTOMOBILE CLUB.

C. A. Benjamin.—President of the Common Council John W. Sadler, Alderman Frank C. Wenz, and City Messenger Frank Ormsbee.

H. W. Chapin.—Aldermen M. E. Monohan, Frank C. Allen and H. A. Rich.

Foreman Wilkinson.—Mayor's Executive Clerk H. C. Clarke.

Frank Witman.—Commissioner of Public Works A. R. Robinson, Commissioner of Charities H. D. Burrill, President of the Board of Education Giles H. Stillwell, and City Engineer F. J. Schnauber.

John Wilkinson.—Aldermen Louis Lohman, P. J. Cawley and John L. Schneider.

A. T. Brown.—Comptroller E. J. Mack, City Clerk G. J. Metz, and President of the Civil Service Commission J. B. Fisher.

E. H. Dann.—Corporation Council W. W. Magee, Alderman F. A. Easton, and Clerk of the Board of Contract and Supply F. D. Pierson.

MOTOR CARS IN G. A. R. PARADE.

Special Correspondence.

MINNEAPOLIS, May 21.—An automobile division will be a feature of the Memorial Day parade in this city. The G. A. R. committee has already issued a general invitation to automobilists, and many are indicating their intention of participating.

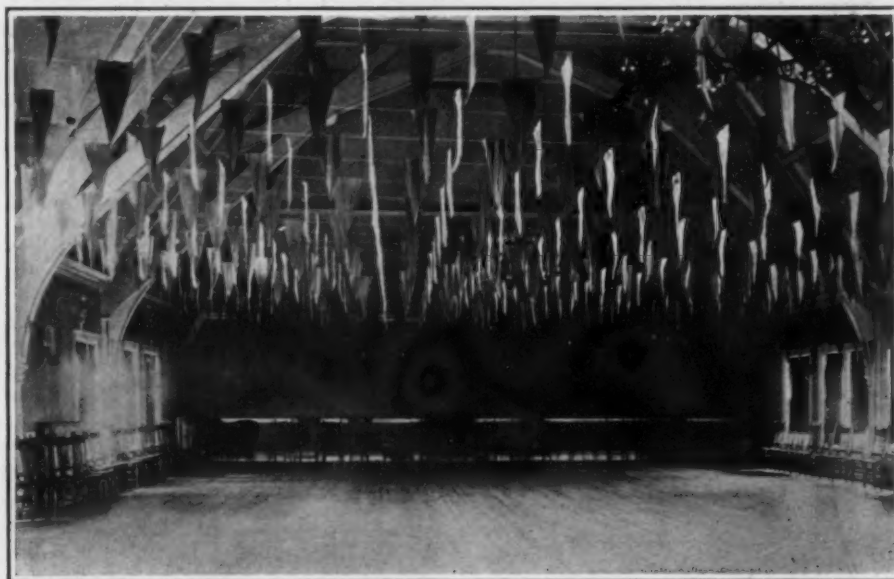
The primary purpose of asking for the service of automobiles was to carry the old soldiers who are unable to march. Formerly carriages have been supplied, but this year Captain A. A. Kelly conceived the idea of procuring the more modern method of locomotion. This was adopted by the committee, and general invitations were issued.

So many of the auto owners volunteered that the idea has elaborated upon, and an entire division will be set aside for the machines, to be commanded by Captain Kelly. This will be the first time in the history of the Grand Army of the Republic that automobiles will be so conspicuously represented in a parade.

BRIDGEPORT PARADE AND DINNER.

Special Correspondence.

BRIDGEPORT, Conn., May 23.—The automobile owners who participate in the parade to be held on Memorial Day will have something at the end of the route to pay them for their pains, in the shape of a dinner at Laurel Beach. The parade committee of the Automobile Club of Bridgeport decided that it was "no fun" to trail along in the dust at the rate required by law for a number of hours for the edification of the multitudes and then disband.



BALL ROOM IN EVANSTON BOAT CLUB, LEASED BY THE CHICAGO AUTOMOBILE CLUB.

so the idea of a big dinner was suggested and enthusiastically received.

The route of the parade will extend through the city and end at Laurel Beach. The dinner will cost \$1. Invitations will be sent to out-of-town clubs and to every automobile owner in the city. Participants in the run will not be asked to decorate their cars, but "autos" so treated will be given prominent positions in line.

START OF GETTYSBURG RUN.

The following cars and passengers started on the Gettysburg tour on Thursday, May 26. There was no formal meeting-point, each tourist starting when most convenient and joining the others along the road.

William Ross Proctor, wife and chauffeur, 10-horsepower Renault; Dr. C. T.

Suggestions to the Inexperienced.—II.*

A Simple Discussion of the Principles of the Gasoline Car for the Benefit of Novices.

By A. D. RIVER.

THE EXPLOSIVE MIXTURE.

NOW that the general principles of action of the two leading types of gasoline motors have been explained, it will be profitable, before going more closely into their construction and operation, to consider the accessory devices by which the fuel is prepared for burning and by which ignition is produced.

First of all we will consider the apparatus in which the liquid fuel is converted into vapor and mingled with the air necessary for combustion. This apparatus is known

contrary, occupies a space actually less after burning than before burning, provided the burnt gases have been cooled to the original temperature. The power derived from the explosion is therefore due simply to the heat of combustion, on the principle of physics that with equal pressure the volume of a gas is proportional to its temperature measured from absolute zero (-273 degrees Cent.). If the gas is confined, as in the gas engine cylinder, its pressure will follow the same law of proportion. In consequence, the effect of exploding the gas in the cylinder is to increase its pressure at the beginning of the power stroke approximately three times, and this pressure is partially converted into work by the expansion of the gases on the power stroke.

As gasoline is a hydrocarbon, the products of combustion will be carbon dioxide, or carbonic acid gas, CO_2 , and water vapor, H_2O . The nitrogen of the air remains inert.

A mixture of gasoline vapor and air will burn rapidly or slowly, according to how nearly correct the proportions of fuel and oxygen come to those theoretically required for complete combination of each other with the other without residuum. A slightly weak mixture will burn a little faster than a mixture slightly too rich, but practically it is desirable to confine the limits of variation in the mixture to the smallest possible terms. For this reason it is very essential that the vaporizing device shall be substantially uniform in its action under all conditions.

PRINCIPLES OF THE CARBURETER.

There are two different principles on which the carbureter may act. It may draw the air over the surface of the liquid fuel, thereby evaporating it substantially as if the gasoline were in the open air, but more rapidly. It may, on the other hand, make use of the principle of the atomizer, and draw a jet of gasoline from a nozzle into a sharp stream of air, which breaks it up into spray and evaporates it almost instantly. The former device, which is called the surface carbureter, is shown in Fig. 1. A body of liquid gasoline, L , is contained in a receptacle R , such that the sheet of liquid presents a maximum surface to a draft of air directed against this surface by means of a plate P , which may be supported by a float so as to preserve a uniform space between it and the liquid. As the evaporation of any liquid involves the absorption of heat from any substance nearest at hand, the air and the carbureter would quickly become too cold for successful evaporation if heat were not supplied in some way, and this is usually accomplished by warming the air before it enters the carbureter.

For various reasons, such as change in the quality of the fuel and also changes



EVANSTON BOAT CLUB HOUSE USED BY CHICAGO AUTO CLUB AS COUNTRY CLUB.

Adams, wife and chauffeur, 10-horsepower Autocar; R. A. Greene and three passengers, 16-22-horsepower Locomobile; John A. Hill and three passengers, 24-horsepower Pan-American; Frank G. Webb and three passengers, 20-horsepower Winton; J. M. Waters, 20-horsepower Panhard; H. M. Belding, Jr., and Mr. Maserole, 35-horsepower Peerless; William D. Gash, Ford; Henry B. Joy, R. A. Alger, Jr., T. H. Newberry and P. H. McMillan, 24-horsepower Packard; Robert Lee Morrell, Mrs. Morrell, D. H. Bates and C. W. Coleman, 16-22-horsepower Locomobile; Emerson Brooks and Mrs. Brooks, Cadillac; E. T. Davis, Philadelphia, and three passengers, Mors; Louis R. Adams, Haynes-Apperson; Charles G. Wridgeway and three passengers, 24-horsepower Peerless.

The tourists will spend Saturday afternoon and Sunday forenoon in Gettysburg.

variously as the mixer, the vaporizer, and the carbureter, the last mentioned name being the most common. It will be understood that at the outset the fuel is not burned in a liquid state, since it would be impossible to burn it thus with any degree of rapidity, whereas, when it has been vaporized, it is the practical equivalent of a gas, and when mingled with the right proportion of air it burns with almost explosive rapidity. From this circumstance the internal combustion motor is frequently called the explosion motor. It should be understood, however, that the explosion is very different from that, for example, of gunpowder, in which a solid containing in itself all the elements necessary for combustion is converted by burning into a gas of an enormously greater volume than the original powder. The explosive mixture of the gas engine, on the

* Continued from page 516.

in the saturation and temperature of the air, the amount of gasoline taken up in this way is liable to constant variations. These are best corrected by making the mixture first too rich and then diluting it by opening a

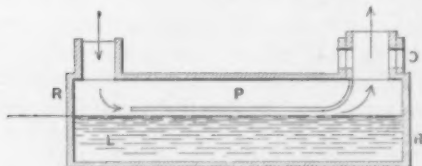


FIG. 1.—SURFACE CARBURETER.

shutter *O*, through which more or less fresh air can enter. This apparatus is used with considerable success on motor bicycles, but for larger motors it has been found quite unsatisfactory for several reasons. In the first place it would require a carbureter of excessive size to give the amount of evaporating surface necessary. Again, the gasoline cannot be prevented from splashing and thus constantly changing the quality of the mixture. Most important of all, however, is the fact that gasoline is not a homogeneous compound, but a mixture of many compounds of varying degrees of density. The result of this is that the lighter constituents evaporate first and the gasoline becomes progressively too heavy or "stale" to give a good mixture. For these reasons the atomizing or jet carbureter is now practically the only one used.

JET OR FLOAT-FEED CARBURETER.

In the jet carbureter the normal level of the gasoline when no air is being sucked through the supply pipe by the action of the engine is slightly below the opening end of the nozzle *N* (Fig. 2). The gasoline is lifted to the nozzle partly by the slight vacuum produced in the tube *T* by the suction, and partly by the simple rush of the stream of air, which is usually contracted at that point so as to give it a velocity of 200 feet or more per second when the motor is running at full speed. It is essential that the gasoline maintain substantially this level at all times, so that a direct connection to the gasoline tank is impossible. This is

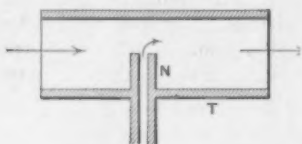


FIG. 2.—SPRAY JET CARBURETER.

managed by allowing the gasoline to descend from the tank to a float chamber (Fig. 3) on its way to the atomizing nozzle. This is a cup *C* in which a float *F*, sometimes of varnished cork and sometimes of hollow spun copper, controls a small valve *V* through which the gasoline must enter. When the level of the gasoline reaches the level *LL* this float closes the valve, and a fall in the level opens the valve. In the jet carbureter, as in the surface carbureter, it is necessary to supply heat to prevent the mixing pipe

T from becoming too cold for ready evaporation. This is accomplished either by warming the air, for which purpose the air may be drawn from immediately around the exhaust pipe of the engine, or by providing a space in the base or walls of the carbureter, through which hot exhaust gas from the engine or hot water from the cylinder jacket is allowed to pass.

AUTOMATIC REGULATION OF MIXTURE.

It might be supposed that an arrangement of this sort would give a uniform mixture under all conditions, since evidently a slow stream of air through the tube will suck but little gasoline in a given time, whereas a fast stream will produce a more intense suction of the gasoline, so that the velocity of passage of the air and gasoline should be substantially proportional. It is found, however, that in point of fact a sharp stream of air sucks more than its share of gasoline, and at very low speeds the same adjustment of the carbureter does not give gasoline enough. Although most carbureters will

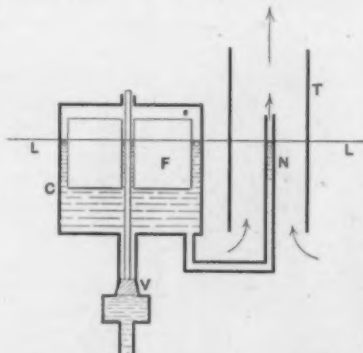


FIG. 3.—FLOAT FEED CARBURETER.

work under ordinary variations of motor speed and throttle opening without changing their adjustment, still it is impossible under such conditions to get the maximum efficiency of the motor at more than one speed, and for this reason numerous devices have recently made their appearance for automatically varying the amount of air to compensate for the changes in the gasoline spray. Consideration of these especial types of carbureters, most of which were first produced abroad, and are now being imitated in this country, will not hereby be attempted. All of them, however, are constructed on one of two principles, one being to open an auxiliary air inlet in proportion as the throttle is opened,—it being understood that the throttle is always placed between the carbureter and the engine, not the carbureter between the throttle and the engine,—and the other to regulate this auxiliary opening automatically by a spring or the like in proportion to the intensity of suction. By means of these automatic carbureters efficiencies have been obtained which a few years ago would have been thought impossible.

GASOLINE VALVE CARBURETER.

Besides the above two classes of carbureters, there is a third, which is sometimes used in this country, but seldom abroad, in

which the necessity for drawing the gasoline from a constant level is dispensed with by the use of a small valve which closes the gasoline nozzle except when the stream of

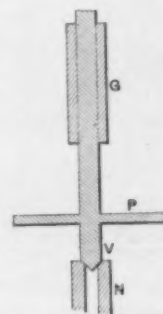


FIG. 4.—GASOLINE SPRAY CHECK.

air is flowing. With this device it is possible to locate the tank considerably above the carbureter, without causing the gasoline to escape by gravity from the nozzle and flood the mixing chamber tube whenever the engine speeds or runs slowly. Fig. 4 indicates the principle. *N* is the gasoline nozzle, and *V* is a light valve with a stem working in a guide *G* in the mixing chamber. The baffle plate *P* attached to the valve is so located that the upward stream of air must lift it, thus opening the valve. The valve is made as light as possible, so as not to cause unnecessary resistance to the incoming air. Sometimes a light spring is applied to make the valve close quickly at the end of the suction period.

OBJECT OF COMPRESSION.

When the mixture has been perfected by means of the apparatus described above, it is drawn into the cylinder and compressed. The compression of the mixture, by certain laws of physics too technical to be explained in this article, enables a larger proportion of the total energy of combustion to be converted into work than would be possible if the mixture were burned at atmospheric pressure. In addition, the compression heats the gas, and both the higher temperature

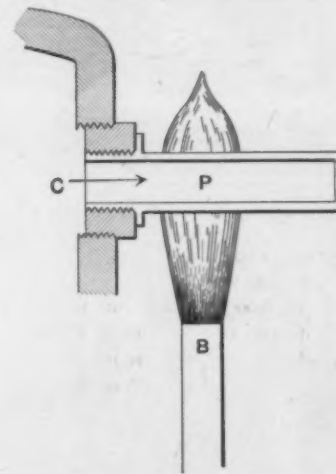


FIG. 5.—HOT TUBE IGNITION.

and the higher pressure favor ready ignition and quick combustion of the charge. After compression the charge is fired by application of heat in one or another form.

HOT TUBE IGNITION.

A very simple device for igniting the charge, and one which until six or seven years ago was almost universal, is the so-called hot tube. A tube *P* (Fig. 5) of platinum or nickel alloy, with its outer end

closed, is screwed into the combustion chamber C and heated by a blue flame from a Bunsen burner B fed with gasoline vapor or alcohol. This tube is normally filled with burnt gas, but on the compression stroke, when the cylinder is filled with fresh gas, a portion of the latter is compressed into the tube, crowding the dead gases before it into the far end of the tube. When the fresh gas strikes the incandescent portion of the tube it ignites and the flame is spread to the rest of the charge. There are many objections to the hot tube, in spite of its simplicity and reliability. It is an element of great danger in case of accident, and it is very difficult to keep the tube hot when the car is moving fast, as air drafts will blow the flame and cool the tube in spite of any shields that can be applied. Again, as will later be explained, it is highly desirable to vary the moment of ignition according to the speed of the engine, so as to produce a late ignition at slow speeds and an early ignition at high speeds, and this cannot be done with the hot tube, which gives a time of ignition affected only by the heat of the flame and the compression of the gases within. For these reasons the electric spark is now the accepted means of ignition. The various devices for producing the spark, which may be divided into two classes, according to whether they produce the primary or "make-and-break" spark, or the secondary or "jump" spark, will be explained in the next instalment.

(To be continued.)

FREIGHT RATE REDUCTION.

The railroad powers that be are apparently awakening to the fact that there is something ridiculous about the present classification of automobiles for freight purposes. At any rate, the latest circular of the Official Classification Committee contains the following clause:

"Vehicles, N. O. S., finished or in the white, wheels and seats detached and packed flat inside, crated or boxed; package not exceeding 30 inches in height and 110 inches in length, minimum weight 2,000 pounds each."

This applies only to the smallest automobiles, which were formerly rated at a minimum of 6,000 pounds, but is nevertheless of interest as a tendency to move in the right direction. This action on the part of the classification committee has no connection with the movement of the N. A. A. M. toward obtaining a general reduction of the freight rates on automobiles.

"SEEING PHILADELPHIA" from an automobile has become a fad, the only drawback at present being the inability of the one big car (with its two trips a day) to handle the traffic. The start, from the Keith Chestnut Street Theatre, is always watched by a crowd, which hugely enjoys the scramble of the passengers for seats—the end ones seeming to be the favorites. At each trip there is always a half-dozen or more disconsolates who cannot be accommodated.

Automobile Boat Racing Rules.*

Complete Text of the Rules Adopted by the American Automobile Association Racing Board.

Regatta Officials, (12). There shall be one referee, three judges and three timers, who shall act in their respective capacities at the start and finish. There shall be one umpire for each stake, buoy or mark turned, who shall report all foul turns of interferences. All officials to be named by the promoting organization approved by the Racing Board.

Regatta Committee, (13) The Regatta Committee shall be charged with the duty of all preliminary arrangements; with the expedition of the events scheduled; and with such offices as may be required of them by the referee. This committee shall provide transportation for all officials and must have a despatch boat at the disposal of the referee.

Walkover (Sailover), (14) In case but one boat reports to start in an event, the referee may announce the minimum time in which the course may be covered.

Appeal from Referee's Decision, (15). The owner binds himself, in case of dispute or accident, to abide by the decision of the referee, or as a final resort to appeal to the Racing Board, and waives the right, in any case, to appeal to the civil courts.

False Entry, (16). If an owner races of allows a boat to race which no longer conforms to the certificate of registration, or under a false certificate or declaration, he shall be disqualified until his boat be remeasured as provided in Rule 6.

Postponement, (17). In case the sea or weather should prove dangerous, the Regatta Committee, the referee concurring, may postpone a race or regatta.

(18). After a race or regatta has started the same may be postponed, as provided in Rule 17.

(19). In cases of postponed races only those boats which have started may start when the race is again taken up.

Anchoring, (20). Anchor may be cast in a race but it must be taken aboard again before the race is resumed. Boats must not lay to alongside of another boat, buoy, pier or mark. Any means of holding the boat to the ground, other than by anchor, except in cases of possible accident to life, shall disqualify.

Embarking and Disembarking, (21). No person shall, during a race, embark or disembark from a competing boat, except in case of accident.

Grounding, (22). Grounded boats must be floated only by the efforts of the crew. If they are so floated they may continue in the race.

Jackstaff, (23). Each boat must carry at the bow a small jackstaff, at least 5 feet high from deck to truck, and carry when competing:

(a) A red flag at the truck at least 12 inches on the hoist and 18 inches on the fly, with its serial numeral in white. Figures must be at least 8 inches high and 5 inches broad, and must be visible on both hands, and

(b) A suitable flag of like dimensions to be designated by the Regatta Committee. The color to indicate the class as provided in Rule 9.

Starts, (24) A warning flag, indicating the class to be called, shall be hoisted on the committee boat fifteen minutes before the starting gun. As further warning the hoisting of this flag shall be accompanied by the firing of two guns from the committee boat. After a lapse of thirteen minutes a second or preparatory gun shall be fired. After a lapse of two minutes the starting gun shall be fired, from which the times shall be taken. The firing of the starting gun shall be accompanied by the lowering of the flag of the class just started. After a lapse of five minutes the preparatory gun for the second class shall begin, and so on. No boat shall cross the starting line before the instant of firing of the time limit gun. If a boat shall have crossed prior to such instant, it must return and again cross. Boats in returning must return bow first, keeping clear of competing boats. Boats in returning to recross the line shall not interfere with other boats regularly started, under penalty of disqualification for competing in that event. Boats may manoeuvre at will prior to the limit gun. Boats which do not start within five minutes after the starting gun shall be disqualified from starting.

Challenges, (25). Challenges for competition under these rules must be made through the Racing Board, accompanied by a forfeit fee of \$100. In case the challenger fails to appear at the appointed time and place this fee shall be divided into equal parts, one-half going to the challenged party and the other half to the American Automobile Association, to compensate its official measurer and engineer for measurements made.

All special conditions must be approved by the Racing Board before the start. Challenges contemplate boat for boat, without handicap or allowance.

Trials, (26). Record and time distance trials, to be authenticated, must be

- (a) Sanctioned.
- (b) Previously announced.
- (c) Over a course accurately measured.
- (d) Timed by approved timers.

(27). No stated fee shall be exacted for such trials, but the owner must assume the expense and insure transportation for proper officials to and from the course.

Navigating Rules, (28). The following

* Continued from page 545.

navigation rules must be followed under penalty of disqualification:

1. In case two boats approach one another, so as to involve risk of collision, one of them shall keep off as follows:

(a) When meeting end-on the course of each shall be altered to starboard.

(b) When crossing courses, the one which has the other on her starboard side shall keep off.

(c) In any condition provided for by these rules, one boat must keep off, the other holding her course and speed.

(d) A boat which is, by these rules, warned off from another, shall, if the circumstances of the case admit, avoid crossing ahead of the other.

(e) Boats which are directed by these rules to keep off shall on approach, if necessary, slacken their speed, stop, and if necessary, reverse.

(f) Overtaking boats shall, in all cases, keep off from the overtaken boat.

(g) Obedience to these rules contemplates due regard of all dangers of navigation and collision, and of any special conditions which may make necessary any deviation from these rules in order that danger may be averted. In cases of boats under way, when approaching each other so, their courses shall be indicated by the following signals on either whistle or siren, viz.:

One short blast shall mean "My course is to starboard."

Two short blasts shall mean "My course is to port."

Three short blasts shall mean "I am reversing at speed."

Five or more short blasts mean general warning, or to attract attention.

II. (a) As soon as an overlap shall exist the overtaking boat must keep well off the boat which is being overtaken.

(b) Boats, in overtaking or passing, must allow at least twenty feet of clear water between them, and the overtaken boat shall not alter her course, so as to compel the overtaking boat to pass within this twenty foot limit.

III. Should, however, an overlap exist between two boats at a time when both of them are about to pass a mark, stake or buoy on the required side, then the outside boat must give the inside boat sufficient room to pass clear of the mark, stake or buoy. When a boat shall have altered her course for the purpose of rounding a mark, stake or buoy, the overtaking boat shall not, under pain of disqualification, establish an overlap, so as to force a passage between the overtaken boat and the mark, stake or buoy. An overlap shall be considered to have been established when an overtaking boat has no longer a free choice of which side she shall pass. In case one of two boats is obliged to keep clear, the other boat shall not alter her course so as to involve a risk of fouling. A boat shall not bear away out of her course

so as to hinder another from passing to starboard. In case a boat shall approach any dangerous obstruction, whether shore, shoal, rock, or vessel, and cannot go clear by altering her course without fouling another boat, then the latter, on being hailed by the former shall at once keep clear.

(Concluded.)

Auto Boat Trophy.

The keen desire for the auto boat championship existing between the firms of Smith & Mabley, owners of the fast boat *Vingt-et-*



AUTO BOAT PERPETUAL CHALLENGE CUP.

Un, and Hollander & Tangeman, United States agents for the F. I. A. T. Italian automobiles and motors, has led to the arrangement of a match race between the racing boats of the two concerns, and the contest will be pulled off some time next month. Each contributed \$1,000 toward the purchase of a trophy, which we illustrate herewith.

The cup was designed and made by Tiffany & Company, New York, and is of 18 karat gold, weighing 1,132 pennyweights. With the base, which is of green onyx, it stands 20 inches high, and the eye is at once attracted by the beauty, and at the same time the simplicity of the design. A figure of Victory, holding aloft a wreath of laurel, stands on the cover. The decorations around the top of the cup are of green gold in the form of sea-weed, set with moon-

stones, zircons, sapphires, and tourmalines—red, white, blue and green. The private signals of the two firms are chased on the side of the cup, crossed, with a decoration of green sea-weed under them. Four dolphins, resting on the foot, support the body of the cup, and below them is more green gold sea-weed. The F. I. A. T. racing auto boat of Hollander & Tangeman and the *Vingt-et-Un*, the Smith & Mabley auto boat, are perfectly modeled in gold and placed one on each side of the onyx base. A gold band, passing around the base, connects the boats and at the same time supports a shield inscribed:

AMATEUR CHALLENGE TROPHY FOR AUTO BOAT.

Presented by Hollander & Tangeman, and Smith & Mabley, Inc.

This trophy will always be held by its winner subject to challenge, never becoming the property of any person or club. The deed of gift has been executed and the cup placed in the hands of the Larchmont Yacht Club, which will be its custodian. The first contest for this rich prize will be between the F. I. A. T. and the *Vingt-et-Un*, and will take place next month.

Making a Flying Start.

A curious feature about the Stevens-Duryea *Spider* racer which has become famous this season through its fast work at the Florida Beach and its quick climb at the Massachusetts Automobile Club's hill climb in Boston last month, is the peculiar method by which the odd looking machine is set in motion.

In a race Otto Nestman, the driver, takes a flying start in another than the usual meaning of the term. The method recalls the earlier days when automobiles often failed to "go," and would hardly give the spectator the impression that Otto Nestman is the up-to-date, skillful driver that he really is.

The accompanying reproduction of a photograph taken at the Boston hill climb shows the method. First he sets the engine in motion. So far, there is nothing remarkable. But then, instead of mounting to the low single seat, he takes his position, standing, at the left-hand side of the car, and with his left hand on the steerer and his right hand just back of the seat where it can grip the car as well as furnish him support, he starts the machine forward with a push. Then he gives two or three quick steps, still leaning on and pushing the car, finally breaking into a short run and ending with a quick and graceful spring into the seat. There he settles himself into position and throws in his gear practically with the same motion, and away goes the *Spider* on her top speed from the outset.

The fact explaining this acrobatic performance is that the curious racer is fitted with one speed only. It is impracticable to throw in the gear with the machine in a position of absolute rest, and hence the need

for the running mount. It looks awkward, but Nestman makes the easiest possible work of it, and the comparative lightness of the car makes it easy for him to handle it. The motors develop 14 horsepower. It was the only American gasoline car at the Boston hill climb to make the ascent inside of 20 seconds.

Cars for Bavarian Railroad.

Writing for the United States Department of Commerce and Labor from Mannheim, Germany, Consul H. W. Harris calls attention to a demand for motor cars for service on the Bavarian railways. He says:

It is announced that the department of traffic of the Bavarian Government has requested a number of prominent firms to submit bids for the delivery of motor cars to be used on the Bavarian railway lines in connection with the present steam service.

For main lines the cars are to be of two sizes, the larger to have a seating capacity for 60 passengers and standing room for 20 more. The cars are to have a compartment for baggage and equipment for drawing one trailer, the two cars to have a capacity to carry 40 tons. The smaller cars for main lines are to be capable of seating 40 persons and furnish standing room for 20 additional persons. This class of cars with one trailer shall be capable of carrying a gross weight of 20 tons.

The motor cars for branch and local lines are to be similar in form to those specified for main lines, but to be of less capacity. They are to be of two types—one, to be stronger than the other, is to be fitted for passengers, freight, and mail service; the other type, for passengers and baggage, with provision for a small amount of mail.

The cars of each type described are to provide for first, second, and third-class



OTTO NESTMAN MAKING A FLYING START IN THE STEVENS-DURVEA RACING CAR.

passengers, with smoking compartments and ample facilities for heating and lighting.

The speed attainable by the larger cars without trailer is to be, on the main lines, 45 miles per hour. The smaller cars designed for main lines are to have an attainable speed of 36 miles per hour. The maximum speed of the cars for use on branch or local lines shall be 30 miles per hour. The other general features of the cars, including the kind of power to be used, the number of axles, the arrangement of doors, etc., is to be left to the bidding firms. July 1, 1904, is fixed as the date on which propositions should be submitted to the department.

The same department has also asked for the submission of bids for the delivery of motor wagons suitable for street and country highway service in connection with the Bavarian railway and postal systems. The

wagons designed for country highways are to be adapted for use also as omnibuses in the carrying of passengers and to include likewise a type of well-built wagon for the delivery of freight and express matter to and from the railway lines and for some considerable distances, when required.

Glidden Tour Commenced.

Special Correspondence.

LONDON, May 10.—Mr. and Mrs. Charles J. Glidden, of Boston, started from the Carlton Hotel, London, on Friday, May 6, on their 20,000-mile tour of the world. The accompanying photograph shows them in their new 24-horsepower Napier just as they were leaving for Scotland. The chauffeur, Charles Thomas, of London, stands near the front wheel.

During the next two years the Gliddens expect to be on the road for 500 days, their itinerary taking them through England, France, Spain, Portugal, Algeria, Tunis, Sicily, Italy, Hungary, Turkey, Greece, Egypt, Palestine, Ceylon, India, East Indies, China, Japan, Hawaii, New Zealand and the United States.

When they arrived in London this spring they had already toured 13,795 miles in fifteen countries of Europe, their tour last year having carried them across the Arctic circle in Norway and Sweden.

It is the intention of Mr. and Mrs. Glidden to return to the United States in July to take part in the tour of the Boston division of the St. Louis run to the World's Fair.

COUNTRY CLUB FOR A. C. A.

The country club committee of the Automobile Club of America has about completed arrangements with the Manhasset Bay Yacht Club, whose club house is near Port Washington, L. I., and the American Yacht Club, at Milton Point, on the opposite side of the Sound, by which the privileges of membership in both clubs will be extended to the members of the A. C. A.



MR. AND MRS. CHARLES J. GLIDDEN STARTING FROM CARLTON HOTEL IN LONDON.

No American Cars in Gordon Bennett.

Results of the Auto-legal Eliminating Trials Held at the Yonkers Track on May 19.

NO American cars will take part in the Gordon Bennett race in Germany on June 17.

This was the result of the elimination trials held at the Yonkers track, near New York, on Thursday, May 19. As a matter of fact there were really no elimination trials or anything approaching them. The

12; ten miles, 13:28; eleven miles, 14:59 4-5; twelve miles, 16:26 2-5; thirteen miles, 17:52 4-5; fourteen miles, 19:20; fifteen miles, 20:50; sixteen miles, 22:21 1-5; seventeen miles, 23:44 2-5; eighteen miles, 25:7 1-5; nineteen miles, 26:38.

The track was heavy, being wet with a slight drizzling rain and mist, and Mr.

the Winton Company declined to abide by the regulations provided for the trial, it is decided that no car be recommended to represent America in the International Cup races this year.

The Racing Committee of the Automobile Club of America, A. C. Bostwick, Acting Chairman.

Perhaps the most disappointed man on the ground was Barney Oldfield, who was to drive the Winton car. He had made a few warming-up circuits of the track before he was ruled off, but did not attempt any speed.

Some interest was revived when about this



RICHARD-BRASIER CARS THAT PARTICIPATED IN FRENCH ELIMINATING TRIALS—THEY IN WINNING CAR AT RIGHT.

only trial was of a legal character and without a jury.

At 1 o'clock in the afternoon, the time set for the trials to begin, the Peerless and Winton cars were on the track ready to start. The Christie car had not arrived, nor did it appear at the track later in the day.

A long legal document in the shape of an agreement between the Automobile Club of America and the entrants awaited the signatures of the latter before the start. By the terms of this agreement the entrants collectively were to be held pecuniarily responsible for any and all accidents that might occur at the track of every conceivable sort and variety, without any regard whatsoever to the person or persons on whom the responsibility for any accident might really lie. This essentially sportsman-like document was signed by L. P. Mooers, on behalf of the Peerless company. Percy Owen declined to sign any agreement that would hold the Winton company jointly responsible for accidents which might occur from causes over which it had no control.

The racing committee of the Automobile Club of America, composed of A. C. Bostwick, Dave Hennen Morris, George J. Scott, and S. M. Butler, secretary, started the Peerless car and ordered the Winton off the track.

Charles G. Wridgeway drove the new Peerless racer around the oval at a slow gait for about half an hour, covering miles in the following times:

One mile, 1:25; two miles, 2:52; three miles, 4:9 2-5; four miles, 5:25 2-5; five miles, 6:47 1-5; six miles, 8:1; seven miles, 9:19 3-5; eight miles, 10:38 3-5; nine miles,

Mooers decided to call off his car. He objected to playing solitaire even as representative of the United States in the International race, provided, of course, that his car would have been approved by the club committee.

A long wait followed, in which the 200-odd automobilists who had come down mostly in cars discussed the situation and kept in humor by visits to the hospitable clubhouse at the track.

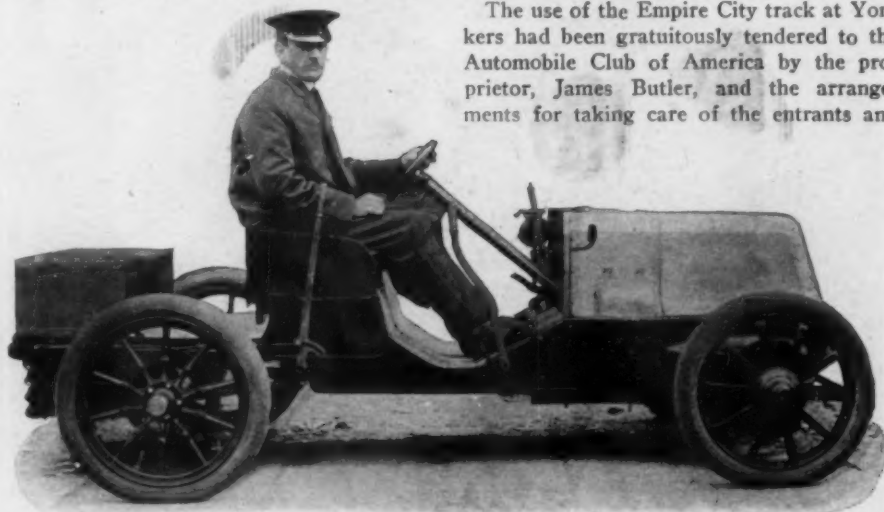
Meanwhile the sportsmen who constituted the committee were in session and about 3 o'clock issued this bulletin:

In view of the fact that Mr. Mooers has withdrawn his car, that Mr. Christie failed to compete in the trial, and that

time B. M. Shanley, Jr., drove his 90-horsepower World's record Mercedes car around the track. It was not in racing trim, however, and when he had covered a couple of miles in 1:15 or better, he also withdrew. This trial was, of course, purely for pleasure and had no connection with the more serious work of the real auto-legal contest of the day.

Several interested persons reported that the Christie car was on the way to the track, and a few automobilists waited, hoping that the car would turn up and make an unofficial try of the mile. After a long wait the drizzle turned to heavy rain and the faithful few took to their cars and returned home wet and disgusted.

The use of the Empire City track at Yonkers had been gratuitously tendered to the Automobile Club of America by the proprietor, James Butler, and the arrangements for taking care of the entrants and



CHRISTIE RACING CAR THAT FAILED TO APPEAR AT THE YONKERS TRIALS.

the visiting automobilists, who were admitted without charge, were splendidly carried out under the supervision of the courteous secretary of the track, Alfred Reeves.

After the announcement of the results of the auto-legal trials Mr. Butler expressed his high appreciation of the sportsmanship of the responsible parties and of automobile racing in general, and announced that as a mark of esteem he would bar automobiles from the track in future and would cancel the automobile race meeting which was slated for June 4.

French G. B. Trials.

As a result of the French eliminating trials carried out on May 20, over the shortened Ardennes circuit, the following team will represent France in the race on June 17 for the International Cup:

1. M. Théry.....Richard-Brazier
2. M. Salleron.....Mors
3. M. Rougier.....Turcat-Méry

The course was as published in these pages last week, its length being about 93.6 kilometres (58 miles). It had to be covered six times, giving a total length for the race—for such it was, since the selection of contestants was made on the basis of average speed pure and simple—of 348 miles.

Four controls were established, as follows, starting from Mazargan: Voziers, 10 min.; Le Chesne, 5 min.; Novy Level Crossing, ½ min., and Rethel, 10 min. The longest run without a stop was 30 kilom., and on the six rounds of the course each car had to be stopped and started twenty-four times. The roads throughout the circuit were sprinkled twice with Westrumite, the



SERPOLLET STEAM RACING CAR IN FRENCH GORDON BENNETT ELIMINATING TRIALS.

new dust-laying compound, to render the course as safe as possible for the large number of machines circling around it.

The rules permitted no assistance to be accepted in controls, all work on the cars having to be performed by the driver and his mechanic. Outside of the controls extra help could be employed and reported. On the day of the race the whole course was absolutely barred to vehicles of all kinds.

Seven timekeepers were employed, and on entering each control each contestant was given a watch, which was started when handed to him, and which indicated when he would be allowed to restart from the end of the control.

The order of start was determined by lot, and resulted in the following numbers being drawn: De Dietrich, 1, 11, 21; Darraq, 2, 12, 22; Clement-Bayard, 3, 13, 23; Hotchkiss, 4, 14, 24; Richard-Brazier, 5, 15, 25; Serpollet, 6, 16, 26; Mors, 7, 17, 27; Panhard-Levassor, 8, 18, 28; Gobron-Brillie,

9, 19, 29; Turcat-Méry, 10, 20. The first car was sent off at 5 a. m., and the others at two-minute intervals.

From the brief reports by cable, it appears that the most unexpected feature of the race was the comparatively poor showing made by the Panhards. This seems to have been due, not to any lack of speed, but to the motors becoming overheated from some cause. Henry Farman, one of the Panhard drivers, at one time held the lead in spite of his poor position (eighth) at the start, but he had to drop back.

Every car entered started, but, on account of the relatively crowded state of the course, those who saw that they had no chance to win soon withdrew. For this reason, though there were no serious accidents, only ten cars finished. After the winners, these took the following order:

4. M. Gabriel, De Dietrich.
5. M. Le Blon, Serpollet.
6. M. Caillois, Richard-Brazier.
7. M. Teste, Panhard.
8. M. Farman, Panhard.
9. M. Pelser, Serpollet.
10. M. Clement, Clement.

M. Clement is said never to have driven personally in a long race before. The good showing made by one of the Serpollet steamers is worth noticing.

About most of the French cars no particulars of importance are at present available, but it seems certain that none of the successful machines approach the power of the huge Gobron-Brillie racers, which have cut down the mile and kilometre records so often of late, and which failed to score a point in the eliminating trials.

British Trial Dispute

The protest of S. F. Edge against the decision of the race committee, which refused Clifford Earp a place on the British team, in consequence of his smashing his Napier car near the end of the eliminating trials, has not resulted in the committee recon-



M. THERY, WINNER OF FRENCH ELIMINATING TRIALS IN RICHARD-BRASIER CAR.

sidering its decision; and it is reported that Edge will carry out his threat of withdrawing from the team. If he does this, the third contestant also will be a Wolseley.

In the accompanying photographs the three drivers selected by the British club to represent England are shown in their cars during the elimination trials in the Isle of Man.

BEACH AT OLD ORCHARD.

Proposed Scene of Bowden-Stevens Match Found Hard but Obstructed.

An examination of Old Orchard Beach, Me., with a view to ascertaining definitely its suitability for the proposed match race arranged between H. L. Bowden, of Boston, and S. B. Stevens, of Rome, N. Y., and for an automobile tournament with record breaking speed trials, similar to the winner tournament in Florida, was made on Sunday, May 15. George H. Lowe, member of the Massachusetts Automobile Club and of the Chronograph Club, of Boston, accompanied by Walter Schmonk, H. G. Reynolds, and J. S. Hathaway, who first called attention to the prime ocean beach at Ormond, drove up to Old Orchard from Boston on the night of May 14-15 in a White touring car, arriving in time to run over the beach at low tide, which occurred at 6 a. m.

They found a sixteen-mile stretch of beach, most of which was so hard that the tires, supporting a load aggregating one ton, left no impression. Several obstacles, however, break this stretch up so that there is only one stretch three miles in length that is unobstructed. A high iron pavilion extends across the beach opposite the Old Orchard railroad station, its heavy iron columns rising from the sand at thirty-foot intervals. If operators cared to take the chance of running between these, a five-mile straight-away could be laid out. North of the pavilion there is a three-mile stretch that could not be improved upon, as even at high tide a speed of thirty miles an hour was made without discovering soft spots. The beach is smooth and unobstructed by wreckage or knobs of clay. At the north end it terminates at a narrow, shallow creek. South of the pavilion is a two-mile stretch equally good that ends at a group of rocks which straggle across the beach to the water's edge. These might be removed to the level of the sand by blasting.

The approaches to the beach are bad, but a plank runway could be laid across the soft sand. The roads in the vicinity of the beach are all good, the coast scenery is most attractive, and there are half a dozen first-class hotels along the beach. It is a popular summer resort for New Englanders and New Yorkers. Old Orchard is within easy distance of the White Mountain resorts and the roads from Boston are good as far as Portsmouth, and will be in fair condition all the way to Old Orchard as soon as they become more settled with travel.

Hints on Driving a Gasoline Runabout.

IF you have had no previous experience in steering an automobile, you will do well if you are to learn without an instructor, to choose for your first attempt a road where you will have plenty of room to experiment, and where there is little or no traffic. This does not mean that it is a difficult or dangerous matter to operate a runabout for the first time, but it does mean that while you are finding out just what the car will do when you move a lever, it is wise to be where your attention will not be distracted, and where a wrong move on your part will not entail unpleasant consequences. You will find it very comforting to remember that if you do the wrong thing, or do one thing when you intended to do another, or can't think, for an instant, how to do just what you want to do, it will not do any harm, and you can put the machine through all its paces, and practice the handling of the controlling levers in perfect safety. Here are a few suggestions for getting acquainted with the running of the car:

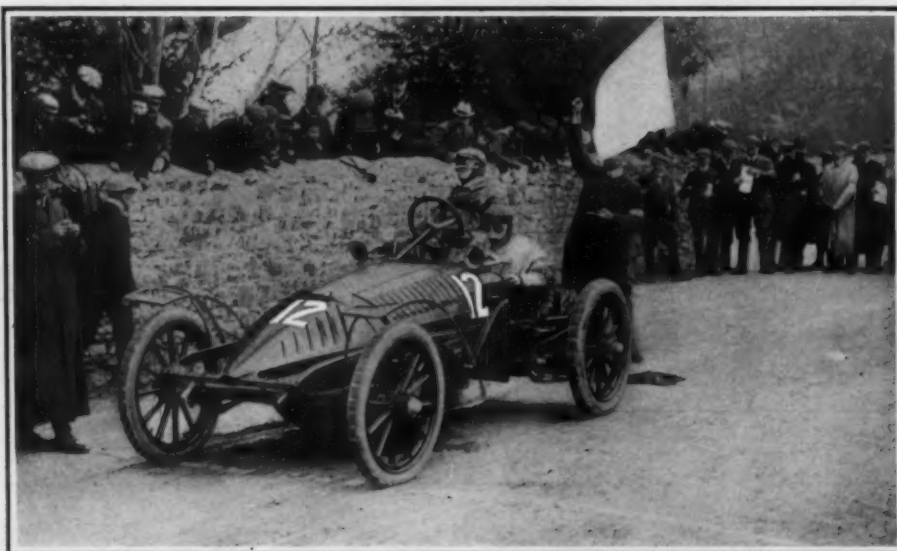
PRACTICE STEERING THE CAR.

Practice steering the car accurately, running in straight lines and also in taking

which to skate around you may experience nothing worse than the peculiar sensation of absolute helplessness that accompanies a real good skid, and find the car "looking backward"; but if there is a curb, or a dry spot where the tires will take a good grip, or anything that will suddenly arrest the sidewise movement of your machine, you will stand a good chance of faring worse, and may lose a wheel, bend an axle or even turn turtle, if conditions are favorable to such a performance.

A PECULIAR CASE OF SKID.

One rather peculiar accident recently observed was the direct result of a skid, and not a very bad skid, either. The owner of a lever-steering runabout was driving over wet asphalt at a rather risky speed, having his wife beside him. A corner was negotiated with little or no reduction of speed, and the car promptly slid off to leeward until the forward part of one of the front wheels came against the rear wheel of a cab. While the skid was by this time pretty well spent, there was still sufficient momentum to jerk the lever violently out of the operator's hand and against



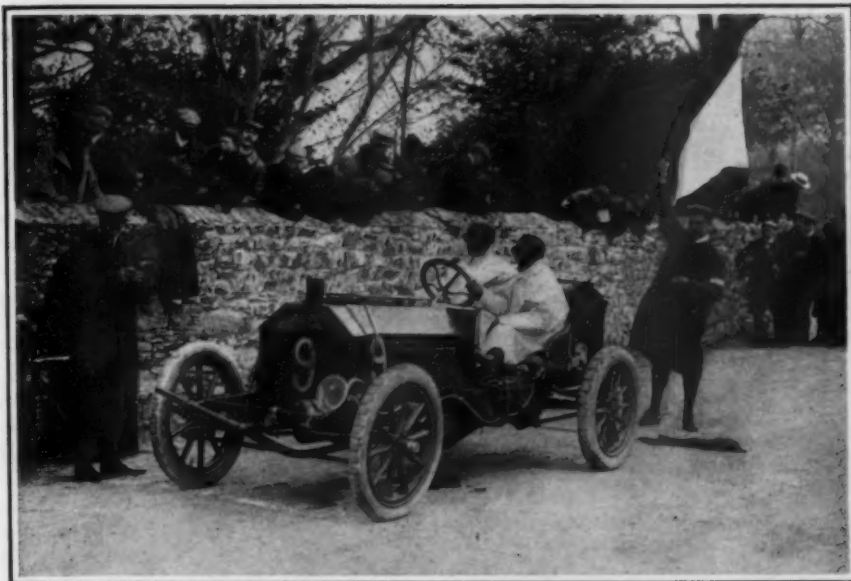
CHARLES JARROTT IN WOLSELEY CAR—Member of British Gordon Bennett Cup Team.

curves. It is a good thing to be able to take a curve neatly, and a little practice at taking corners, both left and right, will soon give you confidence. But avoid making sudden turns at high speed, for there are many things that may happen if this is done, and almost without exception they take place so suddenly that you are powerless to do anything to prevent them. Even if nothing should occur it is a heavy and quite unnecessary strain on the machine, and more particularly on the tires. If the road is wet or slippery you are pretty sure, on making a sharp turn, even at quite a moderate speed, to have an experience with one of the bugbears of the automobilist—skidding. If there is unlimited space in

his wife's knee with such force that she had to be assisted from the runabout and was unable to walk for several days. Of course if a locking device, of which there are several on the market, is on the machine, this cannot occur, and a wheel-steering gear is also exempt from accidents of this nature.

REVERSIBLE STEERING GEAR.

If your steering gear is of the reversible variety—that is, if, by applying force to the front wheels you can cause the steering lever or wheel to move—be particularly careful that stones or other obstacles in the road do not wrench the control out of your hand and thus allow the car to run wild. Large cars are almost invariably fitted with



S. F. EDGE IN NAPIER CAR—WINNER IN BRITISH ELIMINATION TRIALS

irreversible steering gear, some mechanical device being interposed between the controlling lever or wheel and the road wheels so that force applied to the latter will not move the former, but the steering gear of runabouts is frequently reversible.

STEERING WITH REVERSE THROWN IN.

It is well to make yourself familiar with the steering of the car with the reverse thrown in, and at the slow speed given by the reverse this will be found quite easy. In fact, the whole business of steering is readily mastered, and it is quite surprising how soon one becomes an adept. It is well to remember, however, that while you may be quite an expert with your car in the open, it will be a different matter if you essay a trip through a crowded thoroughfare all at once. Don't go into deep water until you are sure you can swim.

PRACTICE STOPPING THE CAR.

Practice stopping the car, and stopping it where you want to—not just coming to a standstill at random. Choose your spot, and stop as nearly exactly on it as you can. A little practice will soon teach how much room you should allow for stopping at any speed. Throw out the clutch, so that the engine will not be driving the car, slow down the engine so it will not race and apply the foot brake. Be sure you throw out your clutch before applying the brake, or you will find yourself trying the power of the brake against that of the motor, a contest in which the brake is apt to get the worst of it. Give yourself lots of room for the first trial, and get a line on the way the brake operates, and the next time you can make a nearer approach to an accurate

BRAKES AND ROAD CONDITIONS.

Beware of suddenly and forcibly applying brakes when on slippery roads. The "grip" of the tires on the road is likely to be very slight, and the wheels easily locked, or held by the brakes so they will not turn.

The car is then ready for the finest kind of skidding. Under such conditions apply the brakes very gingerly. The maximum braking effect at any time is attained when the braking force just falls short of sliding the wheels. Immediately the wheels commence to slide the braking power is reduced to the friction between the tires and the road. So keep your wheels turning, and, as the wheels will lock very easily on a slippery road, be sparing with the brakes accordingly. It is hardly necessary to say that the emergency brake is of no use when the wheels can be skidded with the regular brake.

INSPECTION OF THE BRAKES.

Brakes, both regular and emergency, should be frequently inspected and always kept in the best possible condition, as a great deal depends upon their efficiency. Some little defect in the braking system may not be sufficient to appear in ordinary use;

but under an extra strain, when the brakes are most needed, it may let go and make goodness knows how much trouble. So remember the brakes when making your inspections. A little defect rarely remains little for any length of time. It grows, sometimes very slowly, but it never gets better by being left to itself, and the sooner it is repaired the better.

Metal brake bands should be kept oiled slightly, but brake bands of leather or other material should, as a rule, be kept dry and clean.

BAD BUMPS IN THE ROAD.

Look out for bad bumps in the road, and do not run over them at speed, for they jar the whole machine tremendously, shake up the driver, and are exceedingly hard on the springs, which may readily break under such treatment. If you come to a deep "chug-hole" in the road, slow down and go through it easily. If it is *very* bad it is well to throw in the low gear to enable the car to climb out easily at slow speed. If the holes are full of water, as they are apt to be after a heavy rain, try to run so that the water will not splash into your machinery, and particularly endeavor to keep the electrical apparatus and wiring perfectly dry. The secondary current—that is, the current from the secondary winding of the coil—is hard enough to insulate properly, owing to its "jumping" abilities, even when things are dry and clean, but if the wiring gets soaked there is sure to be a leak somewhere, and it may be serious enough to stop the engine by diverting so much of the current that what does reach the spark plug has not sufficient energy to cross from one point to the other.

Bits of flying mud sometimes find their way into places where they can make their presence felt; for instance, about the vibrator, or the carburetor, or even in some of the bearings, where the grit soon cuts the bearing surfaces.



SIDNEY GIRLING IN WOLSELEY RACER—SECOND PLACE IN BRITISH TRIALS.

On the Road to St. Louis.

An Automobile Trip from New York over the Route of the Endurance Run and World's Fair Tour.

Percy F. Megargel and William S. Harrison, Rochester newspaper men, accompanied by Ralph G. Megargel, of Scranton, Pa., a member of the Scranton Automobile Club, left New York City on an automobile trip to St. Louis last week. They are traversing the route to be taken by the New York section on the tour to St. Louis in July and August. A weekly account of their trip will be published in these columns by special arrangement with the tourists. Following is the first installment.—Ed.

Special Correspondence.

DELHI, N. Y., May 23.—Preparations for an automobile tour of from 2,500 to 3,000 miles over roads that are little known to automobilists and bicyclists require the exercise of unusual forethought in the selection of equipment for all conditions of road and weather. There are many American cars that are capable of making such a trip as we have started on, if the operator is careful to provide a supply of extra parts and fittings to be prepared for trouble that is sure to be encountered. Our party selected an Elmore tonneau driven by 12½-horsepower two-cycle motor, and equipped with large hampers, an extra gasoline tank snugly fitted under one of the tonneau seats, two good oil lamps, a speedometer and an electric contact odometer.

While it is probably unnecessary to go armed, our trio carried a revolver of large caliber apiece, fearing that tramps, certain to be met along some of the roads, would try a hold-up, under the general supposition that all automobilists are men of wealth.

Opinion was divided on the question of a canopy top, but the majority prevailed against it, on the ground that the additional weight of about 100 pounds carried several feet above the body of the vehicle on a light touring car of short wheel base would rack the body and increase the difficulties in mud and wind.

The matter of suitable clothing received considerable attention. Leather garments were unanimously considered most suitable when on the road, but all hesitated about entering the dining rooms of first-class hotels thus attired. Therefore, it was decided to start out in leather, with lightweight suits carefully packed in one of the hampers. When the hamper was unpacked, however, after the first day's run the clothing was a sight to behold. The well-pressed garments were badly wrinkled and furrowed, and after gazing ruefully at our figures in the glass the leather was donned once more and the woolen suits were shipped home by express. We soon became accustomed to the attention bestowed upon us by other occupants of the dining rooms, and probably in reality we attracted no more notice than any three men would who drove up to a hotel with placards on the sides of their car reading: "New York to St. Louis."

It had been supposed before starting that it would be easy to find the roads as far west as Cleveland by the arrows erected for

the N.A.A. M. endurance run of last October to mark the turns, but before twenty miles had been traversed it was found that we would have to depend upon our own judgment rather than upon the markers, for the second or third arrow observed had slipped around and pointed directly skyward. A little later another was seen pointing downward. It was inconvenient to follow in either direction.

Just north of Arden, fifty miles from New York, while bowling along at a twenty-five-mile rate, we ran close to a precipice straight over the brink of which pointed an arrow. Had it been night the car probably would have gone over into the riverbed about fifteen feet below. There was a bridge at this point at the time of the endurance run last fall, but the early spring freshets carried it away, and the township has made no effort to replace it. A temporary bridge, on which we hesitated for some time to entrust our 1,800-pound load, enabled us to cross over to Ramapo.

At another place, while following the arrows, we came to a barrier built across the road where another bridge had been washed away by spring floods, but workmen were reconstructing it and by the time the big tour to St. Louis starts this bridge will be in place again.

The roads from Weehawken, opposite New York, to Newburg, were, with the exception of the bridges, in perfect condition.

CAUGHT IN RAIN AND MUD.

After an excellent dinner at the Palatine, Newburg, the proprietor of which caters particularly to the automobile trade, and personally issues a road map and guide of the country for miles around his city, we started out Grand street, expecting to make Pine Hill that night. Rain began to fall, however, and though oilskins buttoned up around their necks protected the tourists from the elements, the roads became "fiery," the hills being steep and the surface growing muddy from the rain. No one had thought to bring rope or chains for the rear wheels, which spun around in the mud in places without moving the car. This meant get out and shove, and the vehicle, relieved of about 340 pounds, and impelled by that same weight applied to the rear, commenced to move forward; but the new French leather suits, especially the leggings, were soon initiated to Catskill mud.

Eventually the car struck ground that furnished traction and forged ahead slowly

on the low speed. And it proved fortunate that the low gear was in, for while trying to keep out of two deep ruts, and at the same time manage the brake, we landed with a jolt in one of the ruts, the rear and front axles resting on the ground and the wheels not touching bottom then. There was rejoicing then that the car was only a 1,200-pound machine. First the rear end was lifted and swung over to high ground, then the front end followed. Examination showed that beyond bending the front mud guard and clogging the chain with mud no damage was done. Progress was necessarily very slow, and instead of reaching Pine Hill the first night we were thankful to arrive at Kingston late in the evening and seek a good night's rest at the Eagle Hotel.

A VOLUNTEER FIRE BRIGADE.

A laughable incident occurred on the first day out when, through an improper adjustment of the oiling device, the cylinders of the engine received too much oil and a cloud of blue smoke issued from beneath the car. Upon stopping to remedy the fault several inhabitants of a nearby farmhouse rushed out with buckets of water and other fire extinguishing apparatus, courteously ready to give assistance.

It rained again as we pulled out of Kingston the following morning, and, remembering the experience of the day before, we bought a good supply of rope to wind around the tires. The road was so stony, however, that rope was useless, as it would not have lasted for a mile.

GOOD ROUTE FROM KINGSTON TO PINE HILL.

The route laid out for the St. Louis run goes from Kingston through Stony Hollow, West Hurley, Olive Branch, Spokan, Beechford and the Corners of Phoenicia. This is one of the worst pieces of roadway that any of our party ever encountered. Signs are posted in several places warning users of this road that they do so at their own risk, as it is considered dangerous by the Highway Commission. F. N. Sanders, of Albany, New York State road commissioner, drew up a map of a course about ten miles longer than this section of the endurance run route, but which can be traveled at a quarter of the expense in gasoline and less than a quarter of the time. The route as laid out by Mr. Sanders continues up the west bank of the Hudson River for ten miles beyond Kingston, to Saugerties, where it turns west ten miles to Woodstock, thence to Mt. Pleasant and from there over the State road directly to Phoenicia and on to Pine Hill.

Pine Hill is a beautiful summer resort in Ulster County, in the midst of the Catskill Mountains. Owing to the large number of hotels and boarding houses there it has been selected as the first night's stop in the run to St. Louis, as it was in the October endurance run.

Horses in the rural districts passed through are still much afraid of the automobile, and it frequently becomes necessary to shut down the engine to allow them to

pass without bolting and running away. Frequently it is the driver of the animals who is most afraid. On several occasions, when the driver insisted on the stoppage of the automobile, and in great alarm descended from the wagon to lead his horse past the "red devil," the horse did not even prick up his ears. Great care should be exercised by tourists when passing rigs driven by women or children, and if the horse show signs of fright one of the passengers in the automobile should get out and lead the horses by.

(To be continued.)

A. A. A. TOUR TO ST. LOUIS.

Good Progress Reported in the Work of Organization.—St. Louis Arrangements.

The business of arranging the details incident to the A. A. A. tour to St. Louis is in full swing, and Augustus Post, chairman of the committee in charge of the tour arrangements, has been investigating road conditions, making contracts with garages and hotels along the road, and doing the thousand and one things that must be attended to in order that there may be no hitch. Frank X. Mudd, who has made an inspection tour of the roads between Chicago and Joliet, via the Illinois River, reports that this has been made an optional route, if it is found the most desirable one. The roads between Springfield and St. Louis were inspected by Mr. Post and Mr. Mudd, and found to be in good condition though rough.

The "Dome Building" in the State Fair Grounds, Springfield, will be used as a

fore the tour, so that the highway will be in the best possible condition when the tourists pass over it. This particular stretch is eight miles long. Other officials in charge of road work in other districts have stated their intention of doing similar work on their sections.

Mr. Post states that the roads from Chicago to St. Louis are, on the whole, better than he expected, and that the tourists should not experience any difficulty on that score. This statement is confirmed by the



APPROACH TO A CONTROL IN THE FRENCH ELIMINATING TRIALS—See Page 568.

experience of a party consisting of two ladies, Mrs. Louise Kellogg and Mrs. Banser, of Chicago, and a chauffeur, who made the trip from Chicago to St. Louis, a distance of 320 miles, in a total running time of twenty-eight hours, over practically the same route as that inspected by Mr. Post. The police and city officials of St. Louis

rates it has been necessary to charge. The new comers believe that, by advertising and having cars available at the large hotels, it can be made a successful venture.

W. B. Drown, formerly with the Ohio Motor Car Company, has formed the Cleveland Automobile Transfer Company, and will have his headquarters at the Hollenden Hotel. He has purchased four Winton touring cars fitted with canopy tops and will keep one or more cars constantly in front of the hotel, where they will be available for park rides or for hire by the hour. He is making a charge of \$5 for the first hour and \$4 an hour thereafter for four passengers, or \$10 for a trip around the park and boulevard system.

J. M. Reed has opened an automobile livery at 135 Prospect Street and will operate Stearns touring cars, which will carry five passengers. He is also keeping a car in front of the Hollenden and has arranged with a drug store opposite to take orders. His prices are the same as those of his competitor.

NO SYRACUSE RACE MEET.

Special Correspondence.

SYRACUSE, May 23.—The New York State Fair Commission decided at its recent meeting here after considerable discussion not to hold automobile races in connection with the annual fair here next September.

While the Automobile Club of Syracuse had not offered its services to the commission if it was decided to hold an automobile meet, it was understood that the club was willing to take hold of it had the decision been in favor of races. Fear that if unsuccessful the automobile races would bring criticism upon the commission caused the decision not to hold them this year.



A SHARP CURVE ON THE FRENCH ELIMINATING COURSE—See Page 568.

garage for the cars of the tourists on Friday, August 9, and will afford ample room.

Confetti will be laid over the entire route by special cars running from one stopping place to the next, not more than a day in advance of the main body. Thus the trail will be fresh, and the responsibility resting on drivers of pilot cars will be greatly lessened.

Dr. M. B. Pine, an automobilist of South Bend, Ind., and an enthusiast in the sport, has been appointed a local committeeman.

Special repairs will be made on the road between Fayetteville and Syracuse just be-

have been conferred with, and will do all in their power to make the visit of the automobilists one of unalloyed satisfaction. Preparations for the automobile parade are well under way. An entire floor of the Jefferson Hotel in St. Louis will be turned over to the tourists from August 10 to August 15, and the automobilists will make this their headquarters.

Theodor Lewald, Imperial German Commissioner General, has tendered an invitation to Mr. Post to have the entire party visit the German pavilion in a body.

AMERICAN CARS ONLY USED IN WINNIPEG.

**Forty Owners in Manitoba Capital Include
Leading Doctors and Real Estate Men.
Winnipeg Automobile Club Holds its
First Run and is Promoting Races.**

Special Correspondence.

WINNIPEG, May 14.—An automobile club was formed here recently and the opening run was held last Saturday, more than thirty cars taking part. A parade of all the principal thoroughfares in the city was made, and it aroused a great deal of interest. Hundreds of spectators turning out to watch the progress of the procession. The line of cars was headed by Dr. Webster, president of the club, who was the first to make use of an automobile in Winnipeg.

The Winnipeg Automobile Club has for its honorary president Sir Daniel McMillan, Lieutenant-Governor of Manitoba, who is

and the Northwest Territories. Since the opening of the present season many cars have been supplied to prominent men in the city and others are only awaiting the arrival of a further supply of vehicles to join the ranks of the automobile brigade. About forty cars are owned here now.

The conditions in the West are favorable to the rapid development of the use of automobiles, as there are many good roads and each year the different authorities are making great efforts to build new roads and improve those already existing. In Winnipeg the streets are mainly paved with asphalt and are very wide, the main street, running north and south, being about seventy feet from curb to curb.

The surrounding country, although principally prairie, has some very beautiful scenery within easy reach of the city, the principal resort being Silver Heights, where a splendid park with good drives is situated. Among other places of interest are Elm

ket Square, where they have fitted up a garage and keep a staff of competent repairers.

The Canada Cycle and Motor Co. and Boswell & McCulloch handle the Ford, Autocar, Haynes-Apperson and Orient Buckboard, and have recently disposed of cars to Ogden Hinch, president of the Manitoba Colonization Co., who bought a 14-horsepower Autocar, and Dr. Montgomery, the latest recruit from the medical ranks, who purchased a Haynes-Apperson.

G. Carruthers has just received his 20-horsepower Winton touring car, fitted with canopy top. This is at present the largest car in the city and is much admired.

PLAN DOMINION EXHIBITION RACE MEET.

Efforts are being made to arrange a series of automobile races during the progress of the Dominion exhibition, and a fair number of entries are assured if satisfactory arrangements as to the use of the track can be made with the exhibition management.



CARS LINED UP IN WINNIPEG, MANITOBA, TO TAKE PART IN STREET PARADE OF THE WINNIPEG AUTOMOBILE CLUB.

taking a great interest in the movement and will shortly possess a car of his own.

The officers of the club are: President, Dr. Webster; Secretary-Treasurer, Professor Kenrick; Committee, C. Puttman, J. McCulloch, J. Maw, Dr. Devine, J. Arbuthnot, and R. C. McLeod; other members, J. Boswell, G. Erzinger, W. C. Power, D. H. Bain, E. L. Drewry, R. Muir, C. H. Ender-ton, J. McIntyre, W. Bell, C. Drewry, J. Bond, ex-Mayor Arbuthnot, L. Leon, Ogden Hinch and H. A. Alwyn.

Club runs are to be held every Saturday, the members gathering in turn at the homes of the different members. It is hoped that the club will be sufficiently strong by the end of the present season to allow of a clubhouse being built, with a garage attached for the storing of members' cars.

The club is applying to the American Motor League for affiliation with that body, and it is proposed to adopt the Motor League laws. Any owner of an automobile in Manitoba or the Northwest Territories is eligible for membership.

Winnipeg is fast becoming the center of a flourishing automobile trade, as it supplies the needs of the whole of Manitoba

with a drive running along the banks of the Assiniboine River, and Winnipeg Beach, sixty miles from Winnipeg, on the shore of Lake Winnipeg.

Nearly all the leading doctors have purchased light runabouts and find them far preferable to a horse when called to attend a patient at any considerable distance.

Real estate agents are using automobiles to carry intending purchasers out to view property in the suburbs, and have adopted the practice of naming the car after the estate they are handling.

No heavy freight cars are in use at present, but the city authorities are studying the question in regard to an automobile fire engine and street-cleaning wagons.

RUNABOUTS STILL IN THE MAJORITY.

Most of the cars at present used in the city are runabouts, but a recent shipment of 14-horsepower Ford cars was sold within four days of the arrival of the vehicles. Good business is being done with both the Oldsmobile and the Cadillac, which are handled by J. Maw & Co., who, though carriage dealers, foresaw the great future in store for the automobile and opened a department in their splendid premises in Mar-

A good run was made during the week by J. Boswell on a Ford. Dr. Sutherland had been called out to a case on the Springfield Road more than eight miles from the city and used the car as the quickest means of reaching his destination. The time occupied was only fourteen minutes. The doctor will most probably purchase one of these cars directly a possibility of obtaining delivery appears.

No eastern motorists have yet toured in this section, but it is hoped to arrange some inter-club runs at an early date.

PARADE IN MINNEAPOLIS.

Special Correspondence.

MINNEAPOLIS, May 21.—Arrangements for an automobile parade, to be held Saturday evening, May 28, are being made by A. F. Chase, W. H. Wheeler and W. T. Walker, members of the Minneapolis Automobile Dealers' Association. The purpose of the parade is to show that the automobile interest is a large one. Arrangements have been made to have the parade led by mounted policemen. The route will be down Park avenue, to Tenth street, to Nicollet, thence to Bridge Square.

Patents

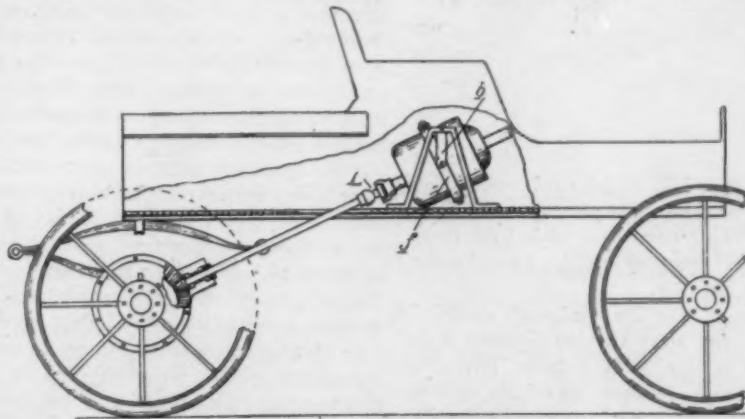
Tire Protector.

No. 759,932.—T. L. Sturtevant, of Quincy, and T. J. Sturtevant, of Wellesley, Mass.

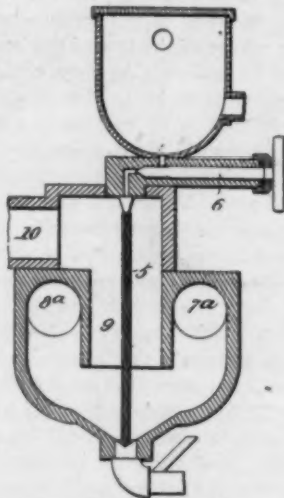
A series of short chains arranged like a brush, to sweep the surface just ahead of the rear tires. It is proposed to magnetize them so they will pick up nails, etc. They are loosely supported, so that they will go free if caught by an obstruction.

Electric Vehicle Transmission.

No. 759,999.—R. Kuhn, of Detroit, Mich.
The motor drives the rear axle through



KUHN ELECTRIC VEHICLE TRANSMISSION.



DICKINSON VAPORIZER.

a propellor shaft and bevel gears as shown. The shaft has but one universal joint, *L*, and the remaining provision for flexibility consists in swinging the motor in a gimbal ring *F*, in which the motor is pivoted at top and bottom. The ring is pivoted at each side in hangers *b*, which are free to swing fore and aft, thus taking the place of a telescoping joint in the shaft.

Vaporizer.

No. 758,902.—F. Dickinson, of Springport, Mich.

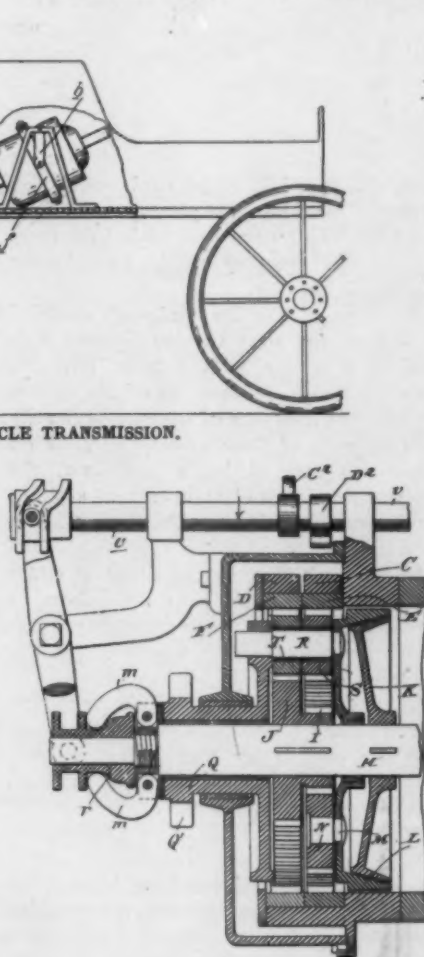
The air enters at ports *7a*, *8a*, passes up through *9*, and out at *10*. The gasoline is fed in a continuous stream past needle valve

6, but, instead of leaving the stream open, the gauze tube *5* is provided, down which the gasoline runs. The purpose is to prevent the gasoline stream from giving up variable quantities of gasoline to the air, due to jarring, shaking, or tilting of the motor, as in a boat.

Planetary Gear Device.

No. 760,160.—C. Smith and T. Stafford, of Topeka, Kan.

H is the driving shaft, and the sprocket pinion from which the power is delivered. *KL* are the two principal members of a conical friction clutch by which power is transmitted directly from *H* to *Q*, the sleeve on which *QI* is secured. *K*, it will be seen,



SMITH AND STAFFORD PLANETARY GEAR.

is keyed fast on *H*, and *L* is riveted to the pins *R*. The clutch is tightened by thimble *r* and dogs *m m*. On *H* are keyed two gears *I J*, of which *J* meshes with pinions *J*, and *I* with intermediate pinions *N*, which in turn engage pinions *S*. Two floating internally-gear rings *E F* engage respectively pinions *T* and *S*, and on their outer surfaces are gripped at will by fixed brake rings *C D*, actuated through shaft *V*, cams *D2 C2*, and levers *C1*, as shown. When *F* is held fast, the slow forward speed is secured through *J* and *T*, while gripping *E* gives the reverse through the intermediate pinions *N*. The construction seems unmechanical in that there can hardly fail to

be serious friction losses between the pinions and the floating gear rings when the teeth have worn, owing to the lack of central support for the latter.

Motorcycle.

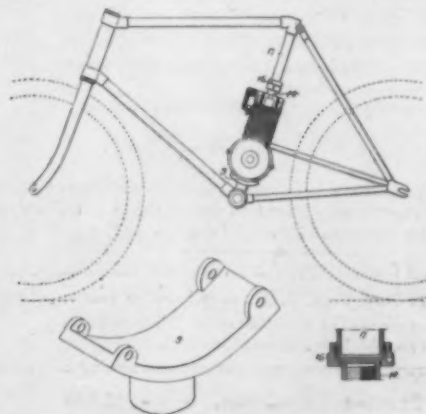
No. 760,320.—W. Driver, of Philadelphia.

The motor is supported at the bottom in the piece *9*, and a cap *14* screwed on the cylinder head is secured to the tube *17* by the union *16*. Tubes *18* steady the motor, which otherwise might break off the cap *14* or the threaded base of *17* by its vibration.

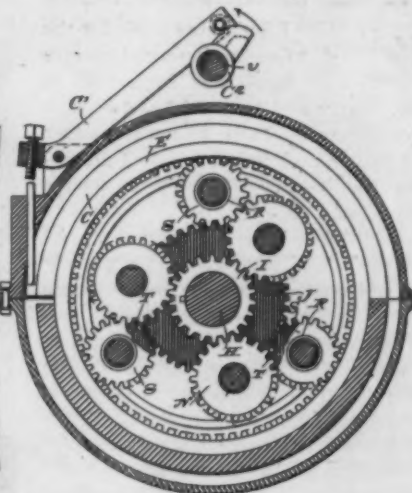
Observation Vehicle.

No. 760,236.—L. G. Nilson, of New York.

A vehicle body having the seats arranged



DRIVER MOTORCYCLE FRAME.



in tiers, and the seatings in each row rising from the sides to the middle, so that every passenger can have a free view on his own side of the vehicle.

Roller Bearing.

No. 760,264.—E. E. Slick, of Braddock, Pa.

The rollers are set up in a mold and the cage cast around them, preferably of Babbitt metal or the like, after which the rollers are forced radially in or out a short distance to free them in the cage. The process evidently necessitates very exact setting of the rollers to get them parallel.



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Copies Printed This Issue, - - 12,000
" " Since January 1, 264,800**Gordon Bennett Race Trials.**

Eliminating trials for the Gordon Bennett Cup race have now been held in America, France and England. and in each country the outcome has not been altogether satisfactory. In each instance indeed the unexpected has happened, though in widely different ways.

America will not be represented in the race, as readers of our news pages already know. Not that any of the cars entered has been eliminated by any process embraced in the accepted use of that word in connection with the race, for really no eliminating trials have been held. By methods borrowed from the managers of the prize ring—talk and agreements that do not agree—the cars are barred out as effectually as though they had really demonstrated structural unfitness.

A document politely called an agreement, but practically a legal hold-up, prepared by the Racing Committee of the Automobile Club of America, was primarily the cause of the fiasco. This was presented to the entrants at the eleventh hour, after they had gone to the expense and trouble of bringing their cars on to New York from Cleveland, and one of them naturally enough declined to sign it.

Ascribing some degree of business sense and acuteness to the members of the Racing Committee the only explanation for the presentation of this document was an intention to squelch the trials without passing on the merits of the machines. The method

was certainly effective though not sportsmanlike, and it will not add to the reputation of the club as the authority in automobile racing matters in America. A fight to the finish is more appropriate in racing circles than any fine display of legal strategy. At its best the conduct of the Racing Committee has been marked by vacillation and dilettanteism.

In England, according to the latest cabled reports, there is still some uncertainty as to the composition of the team. Mr. Edge, the winner of first place in the eliminating trials, is credited with the intention of withdrawing if his running mate, Mr. Earp, is not allowed on the team. Both are drivers of Napier cars, and Mr. Earp was disqualified because of a rather serious accident. He collided with a wall during the trials in the Isle of Man, when in company with the other contestants, and he seems to have been held responsible for the mishap. The real inwardness of Mr. Edge's objection no doubt will be disclosed in next week's mails. His withdrawal would give Wolseley cars the three places on the English team. In no previous trials have these cars qualified, so they will be an unknown quantity in the race.

As none of the Panhard cars qualified in France, the next Gordon Bennett race will be the play with Hamlet left out. Troubles due to overheating of the motors are given as the cause of the extraordinarily poor showing of these splendid cars. First place was secured by a newcomer, the Richard-Brasier, and another new aspirant for international honors, the Turcat-Mery, took third place. Another surprise was the splendid work done by the Serpollet steam cars. It would have been little short of revolutionary had a steam car captured one of the top places. As it was, however, the Serpollet cars came in fifth and ninth.

Barring accidents, it now looks as though Germany had a good fighting chance to retain the cup, if we may judge in automobile racing by what holds good in horse racing—past performances.

Our Racing Results.

If anything beyond the plain facts were needed to enforce the point made last week on this page, regarding the unsuitability of a simple weight classification when both touring and racing machines are competing in the same meet, one might find it in the following paragraph from *The Car*, of London. It is taken from a short report of the Commonwealth Hill climb on April 19, and represents, we should say, the impression made by that event on an unprejudiced outsider:

To celebrate the revolutionary battle of Lexington, the Massachusetts Automobile Club recently carried out an interesting series of hill-climbing tests on Commonwealth Hill, Boston. The victory, however, did not fall to the home representatives, for the honors of the

day were divided between a Mercedes and a Georges Richard-Brasier, which set up new records for the climb; whilst the American cars had to be content with minor successes. The majority, indeed, of the American cars did not show to much advantage in the contest.

A rational classification would not make the \$2,000 touring car any faster or the \$10,000 racer any slower, but it would avoid the farce of treating both as if built for the same ends, and would allow the touring car and the low-priced car to contend with equals.

Illegal Road Racing.

At intervals, for more than two years, a spirit of rivalry between persons interested in certain cars has found expression in unofficial road races against time between Boston and New York. Three drivers have recently cut down the actual driving time between these cities to less than nine hours, representing an average speed of about thirty miles an hour. In each of these cases there was, therefore, a direct and intentional violation of the speed laws of New York, Connecticut and Massachusetts. An average speed of thirty miles an hour on a trip of above 250 miles means, of course, very much higher rates of speed on parts of the route to make up time lost in cities and towns. This is certainly an amazing exhibition of lawlessness on the part of those who ought to be leaders in respect for and enforcement of the law of the land, and it is hard to believe that they could have given serious thought to the illegality of their conduct. Due to the prompt and commendable action of a Connecticut sheriff one of these law breakers was stopped by the opening of a drawbridge and arrested.

There is something to be said, perhaps, in excuse of an automobilist who, seated in a fast machine, comes on an unfrequented road in broad daylight and yields to the temptation to "let out" the machine. No such excuse can be offered by the Boston-New York record breakers, who after all have accomplished nothing more than any well built car of even moderate power should be able to accomplish. Assuming an intentional disregard of the law, there could be no more impolitic act than such races for which widespread publicity is sought. Automobilists are now, even more than at any previous time, seeking fair treatment and recognition of their just rights, but they must appear before the bar of public opinion with clean hands.

Are the manufacturers who are interested so devoid of invention that they must employ such methods to get their machines talked about? Is there not a law in the State of New York permitting the setting aside of a course for road racing? Would it not be vastly more to their credit, more manly, more American, if you please, to get together in friendly rivalry and hold a road race with the law on their side? These are

questions that those interested would do well to consider.

Should any fatal accident result from the illegal use of the roads here referred to, we believe it would go hard with the offender, when a jury of the locality had heard the evidence. For the sake of true sportsmanship and fairness all around we trust the local authorities on the New York-Boston route will keep a keen lookout for such offenders and haul them up with a sharp turn.



By somebody's blunder, which the proof-reader failed to detect, we were made to say last week, in the table on page 549, that the mile and kilometre records made by Louis S. Ross in a 6-horsepower Stanley steamer were achieved at Dourdan, France. As every automobilist knows, the American straightaway steam records referred to were made at Ormond, and the date was the last day of the recent meet, or February 1.



Chicago's erstwhile automobile law buster, Paul Picard, who used to drive a big touring car about the Windy City and gain much newspaper notoriety, was supposed to have a fat bank account, but his affairs are now in the bankruptcy court and among the items on the asset side of the statement filed by him is "one automobile, mortgaged for \$7,000, value \$3,500." The police court magistrates of Chicago and her suburbs appear to have waylaid too often the "goose that laid the golden egg."



"If I can help it, it shall never again be said that a woman was struck down by a lawless gang while peaceably riding the streets of this city."—Police Commissioner McAdoo, of New York, in an interview regarding the assault upon the Gotshall automobile party which resulted in dangerously wounding Mrs. William C. Gotshall. The italics are ours. Does the police commissioner of the largest city in America confess himself helpless to cope with mischievous boys?



"Sight-Seeing Automobiles" are becoming very popular, not only with the public, but with promoters of companies. And why should n't they? One concern operates four brakes on the following basis:

Three trips each per day, of 1-1-2 hours each, 12 trips.

Twelve trips, thirty-five passengers in each load, 420.

Four hundred and twenty passengers, at a fare of \$1.50 each, \$630.

Possible expense per vehicle for storage, battery charging and maintenance, wages one driver and one megaphoner, wear and depreciation, \$20-\$80.

Per diem profit, exclusive of rent of office about 240 square feet floor area, and four office employees, \$550.

International Good Roads Convention.

Gathering of Delegates in St. Louis from United States, Canada, Mexico, Cuba, Europe and the Orient.

Special Correspondence.

ST. LOUIS, May 23.—All roads lead to St. Louis this summer, and the International Good Roads Convention held here last week proved it. Never has a more distinguished assemblage gathered to discuss the public roads. Statesmen, governors, senators, and prominent good roads advocates from nearly every country on the globe gathered to discuss road building and to adopt means to get the roads now. Governor Nathan J. Bachelder, of New Hampshire, ran away to come to St. Louis, leaving his State to look after its own special meeting. One noted Missourian was detained owing to bad roads. Foreign delegates and engineers from Canada, Mexico, Cuba, Sweden and the Orient were present. The convention was a clearing house for ideas about roads. The result will be that America will have more good roads, and have them soon. The railways and waterways have been built and improved by government aid and now it is the American horoscope that a wagon road building era is at hand. The plan as definitely defined is to begin the movement by talking roads first in the town, then in the township, the county, the state, and the nation.

The platform outlined by the convention favors national aid in roadmaking. It favors also State aid, and lays great stress upon the necessity for the localities that want better highways to take the initial steps. Persons everywhere will be asked to organize into township, county, and State associations. Friends of the movement are urged to use every endeavor towards having the two great political parties place in their platforms—national, state and district—planks favoring this movement.

DELEGATES FROM MORE THAN 30 STATES.

The convention began its six days' session at Music Hall, in St. Louis, on May 16. Hon. W. H. Moore, president of the National Good Roads Association, was in the chair, and delegates from over thirty States sat under their respective standards. Governor Dockery, of Missouri, welcomed the delegates, as did also Hon. Cyrus P. Walbridge, president of the Business Men's League of St. Louis. W. H. Moore gave an address on "Promoting Highway Improvement," and Hon. A. S. Mann followed with a speech on the outlook for better roads in the Southern States.

An address by Gen. Nelson A. Miles on "Road Building From a Military Standpoint," was the feature of Tuesday's session. The speaker advocated the reduction of the infantry and said that at least \$5,000,000 expended annually on the army for monotonous camp life could be used in the betterment of public roads.

Wednesday's meeting showed a very decided favoring of substantial national aid in the improvement of the highways. Senator A. C. Latimer, of South Carolina, was the first speaker. He is the author of the bill reported from the U. S. Senate Committee on Agriculture providing for national aid. He told of the growing sentiment in behalf of national aid and predicted the passage of this act at the next session of Congress if the people use proper efforts to influence their senators and representatives.

AUTOMOBILISTS' HELP PROMISED.

Winthrop E. Scarritt, president of the Automobile Club of America, who came commissioned by Mayor McClellan of New York as a delegate, promised the help of automobilists in securing federal aid. The next speaker, Manuel Dionision Diaz, Cuba's representative, read a paper on the progress of road building in the new republic. He declared that more had been accomplished in four years of home rule than in centuries under Spanish dominion. All the work is being done by the National government there, and money has been voted to be expended at the rate of \$2,000,000 for five years. Captain Henry Bernhardt, of Sweden, gave a brief talk, in which he made the statement that America made the best machinery on earth for road building. He explained the system employed in his country, which is entirely under the direction of the national government.

Lewis M. Haupt, of Philadelphia, the engineer who helped select the Panama route, thought federal aid the only means of getting desirable roads. Colonel Lane, of Alabama, was called out from the audience and made an appeal to organize to secure money for road building from the Government. Judge W. A. Faulkner, of Arkansas, told of the features of a bill drafted by himself for the purpose of securing State aid. Gen. J. G. Martin, one of the California commissioners to the World's Fair, after speaking in favor of national aid, took the opportunity of extending an invitation from Governor Pardee for the convention to meet next year in Sacramento. Similar invitations were received from Portland, Ore.; Detroit, Mich., and Richmond, Va.

GOOD ROADS DAY AT THE FAIR.

Thursday was Good Roads Day at the World's Fair. The delegates met in the Missouri Building hall. In a forceful address James Wilson, Secretary of Agriculture, discussed the question of providing good highways as a promoter of the commerce of the nation. Among other statements he said: "Road building in the United States has in the past occupied the same position in the minds of men as all

other agricultural subjects have held. It has been left to the localities of the several States and territories to make such roads as their intelligence and ability enabled them to construct. There had been no chair in any college or university where practical road building had been taught as a part of a young man's education. A large per cent. of the taxes paid by our people into the treasuries of their respective units of government has been for education, but very few have had in view the training of the people who cultivate the soil and who use the public roads more than any other classes. But we hope soon to supply State institutions with educators in road building.

"Foreign governments establish schools to teach young men the art of roadmaking, and we can very profitably establish chairs in each of our State agricultural colleges where young men may be prepared to make the best of the material at hand in each State for this purpose. The laboratory is prepared to test rocks, gravels, and clays for road construction, tiling, cement, concrete paving, stone, brick, wood, asphaltum, and bituminous matter; it makes tests for determining the quality of materials to aid road builders to select those most suitable for their work. Our laboratory is designed to assist each locality in determining the use of the materials it may happen to possess."

One of his weightiest arguments was that States should co-operate directly with the Federal Government in the matter, instead of leaving the agitation to rest with individuals.

After the Secretary of Agriculture had spoken, A. M. Campbell, of Canada, was called upon for a speech. He said the magnificent World's Fair lacked just one thing. While the Transportation Building was full of every known vehicle the soil over which the vehicles were run was missing. "Bring samples of the earth upon which these transportation wagons run. Let each State bring a sample of its best road and its worst. Bring in the genuine thing. Throw the competition open to the world. It would make a most attractive exhibit." The friendly rivalry among the States and the foreign countries would be endlessly interesting.

PRACTICAL LESSONS IN ROAD WORK.

President David R. Francis, of the Louisiana Purchase Exposition, in his address of welcome referred to the effort the Fair management had made to give an exhibition of road building. A model street has been laid out on the grounds to illustrate the ways and means by which even a small town can be beautified and improved. The street is 42 feet wide and is divided into five sections, each representing a city block and showing respectively asphalt treatment, macadam and vitrified brick, while one section is given to the National Good Roads Association for demonstrations of road building to continue during the entire exposition period.

President Francis also said that the Fair management had learned from experience

the necessity of good roads. "We could have done our work much more economically, and had our Fair completed promptly on Opening Day, had we in the first start built good roads through the grounds." The president expressed himself in favor of convict labor on the highways.

The next speaker, Joseph W. Folk, advocated that a State highway commission take charge of road building. Governor Nathan J. Bachelder, of New Hampshire, and an officer of the National Grange, called good roads the nation's safeguard in commercialism, in his address "The Value of Permanent Roads." Governor A. M. Dockery, of Missouri, made a timely address on Good Roads Day. "Federal and State Co-operation" was carefully considered by W. P. Brownlow. Industrial Commissioners J. C. Clair of the Illinois Central Railroad and M. V. Richards of the Southern Railroad, told of the absolute necessity of improved roads if the country's trade is to be increased in proportion to increases made in past years.

The first two hours of Friday's meeting were taken up with five-minute talks by the delegates in response to the call of States and Territories. All of the speakers advocated organization and united effort to secure State and National aid.

NEED OF THROUGH ROADS EAST TO WEST.

Augustus Post, who will conduct the A. A. automobile run from New York to St. Louis in July and August, emphasized particularly that the highways between the East and the West should be linked together. "The lack of continuity is the trouble," he said. "The automobile will necessitate better roads and more uniform laws. St. Louis will in time become the midway station between the East and the West. Through routes will be established, and automobilists ask that they be hard and dry and smooth and go straight to their destination." The comprehensive scope of the automobile was ably presented by Mr. Post.

Congressman J. T. Lloyd, of Missouri, made an able speech in favor of the co-operative plan of improving the highways. He desired agitation to become so aggressive that Congress would be compelled to make a liberal contribution. He asserted that the small sum allowed the Agricultural Department for the Office of Road Inquiries was a disgrace and should be increased so that sufficient engineers could be employed to carry on the work of road building.

RESOLUTIONS ADOPTED.

Several resolutions were passed at the last session of the convention. The report of the Resolutions Committee was adopted without discussion. It declared the improvement of public highways to be of paramount interest to the public welfare and development. The convention indorsed the proposition that the Federal Government assist in the construction of roads to the extent of one-half the cost of the same. The resolution also declared that no member would support any person for public office who

was not pledged to Federal and State aid for good roads. The convention approved the work of the Department of Agriculture in collecting and disseminating information concerning road building and earnestly demanded for the next appropriation \$150,000 for this office and that said office be raised to the dignity of a bureau. The resolutions further declared the sense of the convention to be that all convicts and vagrants be employed on the public roads.

The place of meeting for the next convention has been left to the Executive Board, but it is probable they will decide to hold it at Portland, Ore., during the Lewis and Clark Exposition.

Officers for the National Good Roads Association were re-elected as follows: President, W. H. Moore; secretary, R. W. Richardson; treasurer, Martin Dodge; members of the executive board, Russell Harding and Elliot Durand. One vice-president for each State and territory was also selected.

"DARK HORSE" ENTERED.

The "Comet" Expected to Prove a Surprise at Indianapolis Meet May 30.

Special Correspondence.

INDIANAPOLIS, May 23.—The automobile racing season in this city will begin Decoration Day, when a meet of six events, and possibly seven, will be run at the State Fair grounds, where Barney Oldfield established a record last year for one mile, which has since been broken. Indications point to further record-breaking when Carl Fisher, Earl Kiser, and Harry Hammond will fight for honors in an open five-mile professional race.

The chief object of the meet is to give ambitious amateur drivers a chance to show their skill and to let each demonstrate that his machine is the best. More than a dozen beautiful cups have been purchased as prizes for the winners in the amateur events.

The meet is promoted by the Indianapolis Automobile Racing Association, formed especially for the running of auto races in this city, with Carl Fisher, Charles Sommers and James A. Allison as officers. Two days every week have been set aside by the Fair Ground managers for the use of the track by amateurs and many are taking advantage of the chance to practice. The *Comet*, which is being built by the Premier Motor Car Company, of this city, is looked upon as a dark horse, and if the claims of the makers are realized, many surprises are in store for admirers of heavy racing cars.

The list of events follow:

Five-mile race, 1,200-pound class, 10-horsepower or less; open only to cars selling at less than \$1,000.

Five-mile race, two best in three heats, open to any American machine or driver.

Five-mile open for touring cars carrying four or more passengers.

Five-mile special invitation race.

Five-mile handicap, closed to special racing cars.

A CLIMAX IN HOODLUMISM.

Stone Thrower Inflicts Serious Injury on Mrs. Gotshall—Police Aroused.

Hoodlumism in New York City in as far as it affects automobilists, has been brought to a crucial point by the very serious and perhaps fatal injury last Sunday of Mrs. William C. Gotshall, who was struck in the temple by a large stone hurled by one of a crowd of boys and young roughs. Although the victim rallied on the day following the assault, she has since had a relapse into unconsciousness and delirium, and grave fears are entertained regarding her recovery.

The police department of the city has been thoroughly aroused by this case and not only has a rigorous search for the culprit been instituted, but the affair seems likely to bring about an effectual plan of relief for all automobilists, and probably all other users of the city streets, from this form of rowdiness.

Mr. and Mrs. Gotshall were returning in their automobile to their home in West Seventy-second street from Bayside, L. I., and Mr. Gotshall directed his chauffeur to drive down First avenue and west on 106th street. In East 106th street a score of boys and young men, idly waiting as usual for some diversion, greeted the car—which was a big, handsome one—with jeers, and began throwing various missiles at it. As the chauffeur drove slowly and carefully to avoid running down some of the many children playing in the street, the crowd closed in around the machine. One young rowdy ran up behind it and, taking deliberate aim at Mrs. Gotshall, hurled a large stone with such force that, striking her a glancing blow on the side of the head, it knocked her unconscious and she fell fainting in her husband's arms.

The chauffeur stopped the car and chased the fellow until he disappeared in a building along the street, but meanwhile the crowd of hoodlums increased and, closing in still more, became so threatening that the owner urged the chauffeur to hurry on. Just before entering Central Park the party approached the first policeman that was seen in several blocks, and, still supporting Mrs. Gotshall in his arms, the husband made complaint. He asserts, however, that the patrolman dismissed the matter indifferently, saying that it occurred off his beat and advising Mr. Gotshall to complain at the station.

The party hurried through the park at high speed in order that medical attendance could be secured as quickly as possible, and later Mr. Gotshall visited the police station and entered a complaint. The captain also, it is asserted, treated the matter indifferently until he learned the name of the complainant, whereupon he bestirred himself to action.

The matter was then taken up by the daily papers and brought to the attention of Police Commissioner McAduo, who has promised to instruct the police force to break

up this kind of manifestation of hoodlumism, which has been especially frequent and violent on the East Side, where the foreign population is very dense. Conferences among the borough authorities and with officers of the Automobile Club of America were held and plans discussed looking to the policing of the cross streets leading to all ferry slips in the lower part of Manhattan Island by officers in plain clothes mounted in automobiles—a scheme proposed by the club a year ago—the club to provide the machines. This policing is to be especially provided on Saturdays, Sundays, holidays, and on special occasions when automobilists are out in considerable number.

The efforts of the police department will not cease with this, but the assailant of Mrs. Gotshall will be sought out and punished.

As if to doubly emphasize the need of protection and the suppression of hoodlumism, two similar attacks occurred Tuesday night on an automobile occupied by Albert B. Hilton, son of ex-Judge Hilton, and a party of friends, in one of which Mr. Hilton was struck on the head with a stick, but not seriously hurt, and Mrs. William H. Brown was hit on the head with a piece of board and knocked insensible. A bicycle policeman caught the boy who threw the stick at Hilton, but the victim declined to prefer a charge.

TOUR "SEEING WASHINGTON."

Special Correspondence.

WASHINGTON, May 23.—No less than four companies are now in the field with "sight-seeing" automobiles. The latest is the Seeing Washington & Mount Vernon Auto Company, which was incorporated this week with a capital stock of \$30,000. The incorporators are Frank C. Berens, Emile P. Nussbaum and S. B. Emmert. The District Commissioners granted the company a license to operate two electric buses, one capable of carrying forty passengers and the other twenty-five. The license was granted "subject to revocation if it be found that the use of such vehicles causes damage to the asphalt pavements." This stipulation makes it evident that the commissioners will order the surrender of all such licenses if it is found that the big machines injure the pavements during the hot months when the sheet asphalt is soft.

AUTO-COACHES FOR PHILADELPHIA.

Special Correspondence.

PHILADELPHIA, May 23.—Two gasoline passenger coaches of large capacity are shortly to be placed in service over the roads in the neighborhood of Overbrook, one of the prettiest suburbs of the Quaker City. They are to be for local service only and will resemble the ordinary short trolley car. The trolleys have not as yet penetrated the outlying sections of the suburb. The automobiles will virtually be feeders for the city trolley system and the

Pennsylvania Railroad. They will run over prescribed routes, which will not be definitely decided upon until actual experience demonstrates which are the best. The vehicles are now in course of construction at Morrisville, Pa., under the direction of Alfred J. Wildman, a mechanical engineer, of that place.

COAST RACE MEET OFF.

Ingliside Races and Show Postponed Indefinitely to Await Arrival of Machines.

Special Correspondence.

SAN FRANCISCO, May 18.—The big race meet and outdoor exhibition at the Ingliside Park track, which was originally planned for May 28 to 30, and then postponed to June 3 and 4, has now been postponed indefinitely. It was found, after the racing committee of the Automobile Club of California, consisting of L. P. Lowe, S. G. Buckbee and C. C. Moore, had done considerable work on the preparation of a programme, that the delivery of 1904 cars that have been ordered for some time has been so slow that some of the largest cars will not be here by the dates fixed for the meet. A four-cylinder Columbia and a four-cylinder Pierce Arrow, that bid fair to surpass in speed many of the cars now on the Coast, will not be ready to race until July or August.

A perpetual challenge cup has been offered by L. P. Lowe, chairman of the racing committee, to be competed for by Pacific coast clubs. It will be called the Lowe Cup. Clubs that challenge for it will name their representative. It is to be one of the handsomest trophies for an automobile race in the United States and will, no doubt, excite lively competition. Already a racing car is being built in Southern California (where more speedy machines are owned than in the northern part of the State) to try for the trophy.

NEW AUTOS IN AKRON.

Special Correspondence.

AKRON, May 21.—Only nine new automobiles have been purchased this year in this city of 50,000 inhabitants, according to the record of the Clerk of Council, who issues the permits. The purchasers are Thomas Palmer, manager of the Diamond Match Company; J. A. Swinehart, of the Swinehart Clincher Tire Company; C. C. Goodrich, of the B. F. Goodrich Company; T. W. Miller, manager of the Faultless Rubber Company; and William Buell, A. B. Rinehart and P. H. Schneider.

Mr. Schneider has an Autocar used for delivering packages from his large dry goods store. It is operated by a boy, and is vastly superior to the old method of delivering by horses and wagons. So far it is the only delivery car in the city.

The nine new permits issued this year makes a total of seventy-eight

AMERICAN AND FOREIGN AUTOMOBILE AND MOTOR BOAT FIXTURES.

Automobiles and Motorcycles.

May 23-31.—Automobile Week at Aix-les-Bains, France.
 May — or July 25.—Circuit des Ardennes, Belgium. A. C. of Belgium.
 May 26-June 2.—A. C. A. Club Run to Gettysburg, Pa.
 May 27.—Belgium National Circuit Race.
 May 28.—Race Meet at Point Breeze Track, Philadelphia. Phila. A. C. and Phila. Auto. Trade Assn.
 May 28.—Automobile Parade in Boston. Massachusetts A. C.
 May 30.—Race Meet Readville Track, Boston. Massachusetts A. C.
 May 30.—Hamden Park Race Meet, Springfield, Mass. Springfield, A. C.
 May 30.—Race Meet, Agricultural Grounds, Worcester, Mass. A. C. of Worcester.
 May 30.—Race Meet, Indianapolis, Ind. A. C. of Indiana.
 May 30.—Race Meet, Grand Rapids, Mich. Grand Rapids Motorcycle Club.
 May 30.—Motorcycle Hill-Climbing Contest, Fort George Hill, Manhattan, New York. Motorcycle Club.
 June 1-7.—British Motor Bicycle Endurance Trials. A. C. of G. B. and I.
 June 8.—Parade and Track Events, Cleveland, O. Cleveland, A. C.
 June 10.—Mont-Cenis Hill Climbing Contest. A. C. of Italy.
 June 16-20.—International Cup Race Week, Homburg, Germany.
 July 4-9.—Motorcycle Endurance Run, New York City. Federation American Motorcyclists.
 July 15-23.—Automobile Week at Ostend, Belgium.
 July 26-Aug. 4.—American Automobile Association Tour to St. Louis.
 August 22-September 4.—French Industrial Vehicles Trials, Paris. A. C. of France.
 August 27.—Motor Bicycle Non-Stop 100-Mile Run, British Motorcycle Club.
 August 28.—Ventour Hill-Climbing Contest at Avignon, France.
 August 29-September 3.—Show and Track Races in Milwaukee, Milwaukee A. C.
 September 2.—Chateau Thierry Hill Climb France. A. C. of France.

October 5.—Dourdan Kilometer Trials. *Monde Sportif*.
 October 9.—Gallion Hill-Climbing Contests. France. *L'Auk*.
 October 16-25.—Leipzig Cycle and Motor Show. Germany.
 November 20.—French 100-Kilometer Trials. A. C. of Algeria.

Auto Boats and Launches.

May 30.—Special American Power Boat Association Auto Boat Race. Hudson River at 86th St., New York.
 June 11.—Columbia Yacht Club Races. Hudson River, at New York.
 June 18.—New Rochelle Yacht Club Races. Long Island Sound.
 June 20.—New York Yacht Club Races at Glen Cove, L. I. Sound.
 June 22.—International Motor Boat Races, Kiel, Germany. German A. C.
 June 23-25.—Auto Boat Challenge Cup Races. Hudson River at 86th St., Columbia Yacht Club.
 July 2.—American Yacht Club Races.
 July 4.—Indian Harbor Yacht Club Races.
 July 16-17.—Motor Boat Races. Ostend, Belgium.
 July 16.—Atlantic Yacht Club Races.
 July 17.—Motor Boat Run. Antwerp to Ostend, Belgium.
 July 23-25.—Motor Boat Races. Lucerne, Switzerland.
 July 30.—Harmsworth International Cup Race. The Solent, England. A. C. of G. B. & I.
 August 5-11.—Paris-Decauville Motor Boat Race.
 August 6.—Larchmont Yacht Club Races.
 August 12.—Gaston-Menier Cup Race. France.
 August 13.—Manhasset Bay Yacht Club Races. L. I. Sound.
 August 13-14.—Calais-Dover-Calais Race. English Channel.
 August 15.—Calais-Boulogne-Calais Race. English Channel.
 August 18.—New York Yacht Club Races.
 August 20.—Brooklyn Yacht Club Races.
 August 27.—Larchmont Yacht Club Races.
 August —.—British Reliability Trials for Motor Boats.

automobiles in the city, all of which have been licensed since the ordinance went into effect a year ago. A movement is being agitated by the county agricultural association to prohibit automobiles on the county fair grounds in October. The claim is made by the agriculturists that automobiles frighten horses and are unsafe in the large crowds that gather there. There is likely to be strenuous opposition to the order, if it should be promulgated.

MAY 30 EVENTS AT WORCESTER.

Special Correspondence.

WORCESTER, May 23.—The Worcester Automobile Club has sent out invitations to participate in its parade, races and exhibition for May 30 to every owner and operator of an automobile in the section of Massachusetts surrounding Worcester. These invitations are accompanied by a stamped postal card for reply.

Residents of this section are enthusiastic regarding the carnival, and with pleasant weather a large attendance is expected. The races and exhibition will be held at the Agricultural Fair grounds. The track events are as follows: Races for cars weighing 1,000 pounds and less, from 1,000 to 1,500 pounds, more than 1,500, for electric machines, for special racing cars, for Buckboards, an owners' free-for-all motorcycle race, an obstacle race and a special race for the *Telegram* cup, open only to stock cars owned in Worcester County.

PLAN STAGE LINE IN MARYLAND.

Special Correspondence.

BALTIMORE, May 21.—Representatives of the Knox Automobile Company in this city are promoting a plan to establish an automobile passenger route between Chestertown and Tolchester Beach, on the eastern shore of Delaware Bay. There are no pub-

lic conveyances running between the two places and it is estimated the introduction of the automobile would shorten the round trip from Baltimore to Chestertown by fully two hours.

A representative of the Knox and Captain Eliason, of the Tolchester Steamboat Company, which has a practical monopoly of the travel between Baltimore and Tolchester, left this morning to make a trial trip in a 16-horsepower car. They say that the distance between the two points can be covered in forty-five minutes with a car carrying ten passengers and a fair amount of luggage.

Business men look favorably upon the scheme, and have expressed their intention of subscribing to the stock in case the company is formed.

It is hoped to establish the route before June 1, the opening of the season at Tolchester. This will be the first automobile route in Maryland.

PENNSYLVANIA ROAD MONEY IDLE.

Special Correspondence.

PHILADELPHIA, May 23.—After having been on the statute books for almost a year Pennsylvania's much-lauded good-roads law has been taken advantage of to the extent of applications for the improvement of less than thirty miles of road. It appears that the proportion of money to be paid by the townships and counties is much too large, while that of the State is proportionately small. Meanwhile, the cash appropriated for the purpose is lying in favored banks (which realize a low interest on it), and unless something is done to amend the law at the next session of the Legislature the funds will pile up until two-thirds of the \$6,500,000 will have accumulated. With biennial sessions the necessity for action at the next session is apparent.

DIAMOND CUP COMPETITION.

Consolidation of the American Motor League and the American Automobile Association has raised the question whether the Diamond Challenge Cup offered to manufacturers by the Diamond Rubber Co. can be raced for this season, one of the conditions governing competition for the cup being that competitors to be eligible must be members of the A. M. L. The statement is made by the Diamond Rubber Co., however, that the American Motor Association, as the successor of the American Motor League, takes the place of the former in the Diamond cup conditions. The company has received a number of inquiries regarding the cup, and it will be competed for at a considerable number of race meets this season. The cup must be won three times by one manufacturer or his proper representative before it becomes his permanent property.

NEW ORDINANCES.

An ordinance recently passed by the City Council and approved by the Mayor of Marion, Ia., limits the speed of automobiles and all other vehicles to eight miles an hour.

An automobile ordinance now in force in Muskegon, Mich., fixes the speed limit at ten miles an hour, and provides for a fine of not exceeding \$100, together with costs of prosecution, or imprisonment not exceeding ninety days for a violation thereof.

An ordinance limiting the speed of automobiles to six miles an hour is now pending before council at New Castle, Pa.

A limit of eight miles an hour is placed on automobiles at Coldwater, Mich., with a fine of not less than \$10 nor more than \$50 as a penalty for exceeding it.

The board of aldermen of Macon, Ga., recently adopted an ordinance fixing eight miles an hour as the speed limit for automobiles within the city limits.

The Indiana Automobile Co., of Indianapolis, is increasing the capacity of its plant.

Current News from New York.

"The hit of the exposition" is the way in which R. W. Slusser, in charge of the automobile exhibit at the World's Fair, characterizes the interest that is being taken in the display by visitors, in a letter to the manager of the National Association of Automobile Manufacturers, written under date of May 19. A large number of purchasers seem to be visiting the exhibit and talking business, including a number of agents who want to secure goods. On the day the letter was written two visitors bought steam touring cars and left their checks in payment. Those manufacturers whose exhibits were in place and who were in position to make immediate deliveries were making sales. Senator Latimer, Winthrop E. Scarritt, Augustus Post and Col. A. A. Pope, who visited the exhibit on the 18th, expressed great admiration of the general effect of the decorative scheme.

* * *

The special committee appointed to draw up a constitution and by-laws for the American Motor Association, formed by the amalgamation of the American Automobile Association and the American Motor League, is still at work, the drafting of regulations satisfactory and just to both parties being a work requiring both time and care. The committee expects to be in a position to submit the result of its work to the Association within a short time.

* * *

The Observation Automobile Co., which has operated a line of motor buses in Washington City for some time, has inaugurated a similar line in New York, in opposition to the cars of the Seeing New York Co., which operates from the Flatiron Building. The Observation buses are new double-decked Fischer combination system vehicles. Three regular daily sight-seeing trips are now being made from the Bartholdi Hotel, corner Broadway and Twenty-third street, where the company has located its booking office and waiting rooms. The officers of the company are S. M. Fisher, president; George W. Loft, treasurer; A. W. Buchelder, general manager.

* * *

The Automobile Club of America is negotiating with two clubs on Long Island Sound for summer quarters, and it is understood that a satisfactory arrangement will be arrived at within a short time. A special committee has had this matter in hand for some time, and their report is being awaited with a great deal of interest by the members of the Automobile Club, to whom the country club privileges will be a great boon.

* * *

The McMurtry electric timing device will be used at the motorcycle hill-climbing contest on Monday, May 30. This ingenious invention automatically times the contestants not only at the start and finish, but at any desired intermediate points. A fine list of

entries has been received, and the event is expected to be exceptionally successful. Fort George Hill, on which the contest will be run, extends from Dyckman street to 190th street, and is 2,812 feet long. An excellent view of the course is to be had, the machines being visible from start to finish. The timing apparatus is the invention of Alden L. McMurtry, who is widely known in automobile circles in New York.

* * *

Tourists in New York State will be helped by a convenient "Guide and Road Map of New York," published in one sheet by C. S. Mendenhall. This map, which is 28 by 36 inches in dimensions, and folds into a handy size for the pocket, contains on one side the entire State on a scale of 12 miles to the inch, with a map of Long Island and the country between New Haven and the Hudson River as far as West Point, on a scale of 8 miles to the inch. The main touring routes are indicated in red, and given serial numbers. Other roads are shown in black, without distinction, except for a corporal's guard of "good roads" in slightly heavier lines. The State is ruled off into sections 25 miles square by red lines, giving a good idea of distances.

On the other side are detail maps of the country around Greater New York, Albany, Syracuse, Rochester, and Buffalo, with main routes in red and other good roads clearly distinguished. The scales are from 3 to 8 miles per inch. Inside the cover is a leaflet giving town-to-town distances in detail for each of the main routes, 90 in all, and a brief outline of the character of the roads, which are not necessarily all good.

On account of the large territory to be covered, the map can hardly take the place of road inquiries at turns, but it should be very useful for a vacation tour. It is sold for 75 cents by C. S. Mendenhall, 512 Race street, Cincinnati.

* * *

The Lozier Motor Company has a 30-horsepower high-speed motor launch which it is willing to race against anything in its class for the cup offered by Joseph Cowan, the contest to be held on the proposed Clason Point course. It is possible that Hollander & Tangelman may race their F.I.A.T. 30-horsepower craft against the Lozier flyer. Hollander & Tangelman have accepted an invitation to enter their F.I.A.T. auto boats in the races to be held during the coming season off Marblehead, Mass., under the management of the Eastern Yacht Club. Three F.I.A.T. boats will probably take part in the contests.

* * *

The suit of Dr. G. W. A. Collard, of Bridgeport, Conn., against Frederick C. Beach, editor of *Scientific American*, which was brought five years ago in New York City for alleged damages resulting from Mr.

Beach's electric surret frightening the doctor's horse and causing the animal to bolt and drag the physician about fifty feet, was recently thrown out of court by the New York Appellate Division. Mr. Beach won the suit when it was first tried in New York before a jury, but because Justice MacLean refused to charge the jury to the effect that Mr. Beach's son, who was running the machine at the time of the accident, was his father's servant, the judge of his own motion set aside the verdict and ordered a new trial.

Mr. Beach appealed the case and the Appellate Division, although sustaining the grant of a new trial, held that as both plaintiff and defendant were non-residents the case should not again be brought to trial in the New York courts. Last week Dr. Collard brought suit in Connecticut and began by attaching the automobile. The deputy sheriff who was sent to get the machine asked to have Mr. Beach's coachman run it three miles to the neighboring city of Bridgeport, but, the invitation being declined without thanks, he decided to resort to a horse. Meantime, however, arrangements were made to have the attachment removed and placed on real estate.

The Beach-Collard case was one of the earliest automobile suits in America. The damages claimed have been reduced from \$50,000 to \$20,000.

* * *

It is the intention of Hollander & Tangelman to send Claude Fogolin, the Italian driver, on the American racing circuit with the Fiat car. He is to compete in the races at Philadelphia, May 28, at Boston, May 30, in the Mount Washington Hill Climb in July, and also the Orchard Beach races.

* * *

For some time the facilities for caring for White steam cars at the garage at 215 West Forty-eighth street have been inadequate, and the pressure has been constantly increasing. Hereafter, however, there will be plenty of room and some to spare for new comers, for the White people have secured the building hitherto occupied by the Min-eola stables, at 42-44 W. 62d street, near the Circle. Moving is now in progress, though it will be some time before all arrangements can be completed. The new quarters will have a capacity of probably more than 300 machines, and will contain, besides a garage, a large repair shop, (in fact all repair work will be done there) a show and salesroom and offices. The old garage will be retained, for some time at least, but the new place will be the White headquarters for New York City.

* * *

A judgment for \$846 was recently awarded by the Supreme Court in favor of a New York automobile firm against David Lamar, being the result of a suit to recover rental and other incidentals. It is stated that the automobile in question was used by Lamar in looking up witnesses in New Jersey for the Monk Eastman trial.

CLUBLAND

DETROIT CLUB PROGRESS.

Officers and Committee Chairmen Present Reports.—Annual Election.

Special Correspondence.

DETROIT, May 22.—The annual meeting of the Detroit Automobile Club was held Wednesday night at the Russell House, and great progress was reported on all the projects taken up this year by the organization. President Fred O. Paige was re-elected at the meeting of the board of directors, which immediately followed the club meeting. Mr. Paige has worked hard all year, having set on foot many of the plans for the expansion of the club, and his reelection was a recognition of his efforts to advance automobiling in Detroit. The other officers elected were as follows: First vice-president, Russell A. Alger, Jr.; second vice-president, C. A. Ducharme; secretary, DeWitt Loomis; treasurer, L. H. Case. At the club meeting C. A. Ducharme, L. H. Case and Willis E. Buhl were elected to the board of directors, to succeed George Kenney, William E. Metzger and Fred L. Smith.

The report of Secretary Loomis showed that the club has now 100 members, but the secretary thinks that this will be increased at least 100 per cent. during the present season. He reported also on the condition of the new country clubhouse on the Birmingham road. It was planned to hold the first club run of the season last Saturday to the country clubhouse, but this had to be abandoned owing to the unfinished work of the decorators. The run will be held some time next week.

For the good roads committee Chairman E. S. George reported much progress in the work of getting out the new road map and guide book principally for Southern Michigan. This will be ready in a few weeks. Mr. George stated that the club will soon have the road from Detroit to Elkhart, Ind., well charted for tourists, and with the one now known well from that point to Chicago, Detroiters will have a fine touring route to the Western metropolis.

The committee on laws and ordinances reported that it had been unable to secure modifications of the present city ordinances from the common council because there is so great a prejudice against the automobile in the city by non-owners. The members of the council are beset on one hand by the automobilists for reasonable legislation and on the other by persons who want them restricted in the utmost degree.

A letter from President Henry B. Joy, of the Packard Motor Car Co., called attention to the fact that there is no place in Detroit set apart where owners may speed their machines. He asked that the club secure, if possible, from Park Commissioner Bolger the exclusive use of a portion of the boulevard system as a speedway. There is such a place for horse owners and the motorists feel that they should have an equal

privilege. The matter was placed in the hands of the legislative committee.

President Paige addressed the members at the meeting upon the subject of the unfriendly feeling existing between the authorities of Binghamton and the Detroit motorists, a number of whom have been arrested and fined this season for exceeding the limit of six miles an hour in that village. He pointed out that the Birmingham people had passed the law, as they believed in self-protection, and he admonished the club members to observe it, as although a speed of ten or twelve miles would not be dangerous, there was nothing to be gained by breaking the ordinance, which would only increase the ill-feeling now existing.

Following his talk, a resolution was adopted calling attention of all the members of the club to the ordinance and requesting that it be observed. Good effect was almost immediately produced, for, reading of the club's action the following day in the newspapers, the Birmingham authorities and residents were much mollified, and hastened to send expressions of thanks and appreciation. In a letter to the secretary, they warmly commended the action and stated that they did not wish to be unreasonable and would welcome the club members to their town. Village President Johnston was especially hearty in the expression of his appreciation.

In view of the turn of affairs, President Paige and the other officers of the club will wait as a committee on President Johnston of the village and adjust the whole matter. While it is unlikely that the speed limit will be increased by a change of the ordinance, the town council will probably agree to not molest motorists who do not pass through Birmingham at more than twelve miles an hour. The members of the Detroit club propose to take the town council out for a demonstration automobile ride.

So the display of a spirit of tolerance on one side has begot a like feeling on the other and no doubt will gain in a short time what might never have been obtained if the attitude of antagonism had been maintained.

SYRACUSE CLUB CURBS SCORCHERS.

Special Correspondence.

SYRACUSE, May 21.—The following committees were recently named by President W. L. Brown, of the Automobile Club of Syracuse, for the season of 1904:

Membership—Forman Wilkinson, William S. Dunning, Theodore A. Young; exhibitions, contests, runs and tours, C. Arthur Benjamin, Hurlburt W. Smith, Frederick H. Elliott; law and ordinances, Henry Walters, Wilbert L. Smith, Giles H. Stilwell; good roads, George S. Larrabee, Lyman C. Smith, H. H. Franklin; entertainment, Harry C. Pierce, Carl L. Amos, H. Winfield Chapin.

The club now has an enrollment of seventy-seven members, and it is expected that before the season is far advanced it will have a membership of 100.

It is estimated that at least thirty new

motor cars have been delivered to Syracuse people this spring and that there are many orders yet unfilled. Enthusiasts predict that from 150 to 200 cars will be owned here before fall.

This spring, as in past years, the automobile club requested the city officials before making any arrests for fast driving to bring the matter to the attention of the club officers. When it became necessary some days ago to curb some of the more reckless of the local drivers, Mayor Alan C. Forbes addressed President Brown and a conference was held at which the Mayor, Commissioner of Public Safety Ralph S. Bowen, President Brown and Secretary-Treasurer Frederick H. Elliott were present. As a result, a letter was sent out by the club to every member and motor car owner in the city asking each to be careful and to keep within the legal speed inside the city limits. A copy of the ordinance accompanied the letter. Syracuse has always been free from motor car accidents, and it is the wish of the automobile club to make the city notable in this respect.

INTEREST GROWING IN MAINE.

Auto Club Now Has 200 Members and Wants Country Clubhouse.

Special Correspondence.

PORTLAND, Me., May 23.—The remarkable increase in the interest in automobiling in the Pine Tree State this spring has greatly increased the interest in and the activity of the Automobile Club of Maine, which has existed for several years. Active and associate members have been admitted during the past year until its membership roll now shows a total of more than 200. The present officers, recently elected, are Henry M. Jones, president; Henry R. Stickney, vice-president; George E. Sawyer, treasurer; Howard Winslow, secretary.

The interest in the club has been apathetic up to the present time. Rarely was any event more pretentious than an ordinary monthly run to one of the suburbs of Portland attempted. During the coming summer, however, something more ambitious will be tried, and longer and more frequent runs will be held.

No regular headquarters have been occupied by the club, but so great has the interest in it now become that all the members are determined that a clubhouse should be secured at some point in the nearby country which could be conveniently reached on an afternoon run, and the return made in the evening. Sebago Lake, seventeen miles from Portland, has been suggested, but has been thought too far away for a convenient afternoon's run. Highland Lake, or "Duck Pond," as the old residents persist in calling it, which is ten miles from Portland, has been thought to be the most desirable place for a clubhouse and may be selected. Fishing, bathing and boating may be enjoyed there in quiet. If the new clubhouse should be erected this year, automobiling will then be recognized as one of the sports of Maine.

The new officers of the club are shown in the photograph herewith reproduced. President Henry M. Jones and Secretary Howard Winslow occupy the front seat of the car, while Treasurer George E. Sawyer and Vice-President Henry R. Stickney are seated in the tonneau.

Treasurer Sawyer was the first automobilist of Maine to announce his intention of touring to the World's Fair. He did not wait to join the party which will start from Boston and New York and pick up recruits on the way, as he thought the weather in August, when that run will come off, will be too hot for really enjoying the trip. He accordingly shipped his machine to Cleveland, where he went to meet it and with Mrs. Sawyer traverse the roads to St. Louis. The whole of the return trip will be made over the roads, from the Mississippi city to Portland. Coming back, the ride will be taken leisurely to take advantage of every opportunity of visiting points of interest on the way, and thus make the

NEWS OF THE CLUBS.

PITTSBURG.—The new home of the Automobile Club, now building at the corner of Baum and Beatty streets will be ready for occupancy about July 1.

ROCKFORD, Ill.—The first run of the Rockford Automobile Club held recently proved a success. It was in the nature of a street parade, and twenty-three machines were in line.

SAN FRANCISCO.—The Pacific Coast Motor Cyclist Club has been reorganized with headquarters at 304 McAllister street. James R. Kenna was elected captain and B. I. Bill, secretary.

KANSAS CITY.—At a recent meeting of the Automobile Club of Kansas City a constitution and by-laws were adopted. The election of officers was deferred to a meeting to be held on June 9, at which time the question of a permanent clubhouse will be discussed.

BROOKLYN.—The Long Island Club has decided upon a novel method of protecting

by-laws similar to those of the Syracuse and Auburn clubs will be adopted. An effort will be made to have the Waterloo and Seneca Falls motorists join the Geneva club. The bad condition of the road from Geneva to Auburn was discussed, and it was determined to take immediate steps to its early improvement.

PHILADELPHIA.—The permit for the construction of the clubhouse of the Germantown Automobile Club has been granted to George F. Payne & Co. The building, which will be 63.5 by 42.11 feet, and two stories in height, will be located at the corner of Emlen and Carpenter streets, and will cost approximately \$11,000.

OTTUMWA, IA.—The Ottumwa Automobile Club has been organized with a membership of twenty-five enthusiastic owners. J. F. Kerfoot is president and Dr. A. C. Lee is secretary and treasurer. Arrangements have been made for the care of members' cars in one of the best garages in this part of the West, a three story brick



OFFICERS OF THE AUTOMOBILE CLUB OF MAINE.



MR. AND MRS. GEO. E. SAWYER IN WHITE STANHOPE.

ride home a sight-seeing tour of 1,500 miles.

Mr. Sawyer is known as one of the most enthusiastic automobilists in Maine. He is the leading confectioner of Portland and one of the city's best known citizens. He has for several years been treasurer of the Automobile Club of Maine. He has owned several automobiles, and now has a White touring car and a White stanhope. The latter is being used on the St. Louis run.

Mrs. Sawyer and her two daughters invariably accompany him on all his runs. The leisurely pace of the car and the apparent enjoyment of its occupants never failed to cause people to stop and watch the automobilists as they passed and to remark, "George Sawyer surely gets pleasure out of his automobile, if anybody does."

AN AUTOMOBILE delivery system has been put in operation by the Goenner Brewing Co., of Johnstown, Pa.

its members from the young boys and hoodlums who have made a practice of throwing stones, dead cats, and other missiles at automobilists. It has arranged to send out a number of machines occupied by special police in plain clothes prepared to arrest any such offenders.

BUFFALO.—The Buffalo Automobile Club and the Buffalo Automobile Trade Association are co-operating in the promotion of an automobile tournament at Kenilworth in June. Committees from the respective bodies have been appointed, and are now actively at work.

GENEVA, N. Y.—The Geneva Automobile Club was formed at a meeting held at the Nester Hotel on May 17, pursuant to a call of S. C. Tallman, of the New York State Automobile Association. The following officers were elected: H. L. Rose, president; M. F. Blaine, vice-president; Charles Fairfax, secretary-treasurer. Constitution and

building, about 150 by 75 feet, equipped with a complete machine shop for repair work. The club is contemplating holding a parade on Decoration Day, and many club runs during the summer. Several large cars are owned here and others are yet to come. The Olds, Ford, Rambler, and Mitchell are represented by agents.

GRAND RAPIDS.—The annual election of officers of the Automobile Club was held May 16, the following being selected for the ensuing year: Dr. Perry Schurtz, president; A. A. Barber, vice-president; L. W. Welch, secretary, and M. Fred Avery, treasurer. The above named and Charles Luce, Dr. Hulst and Dr. Eddy, were elected directors. L. W. Welch was appointed chairman of a touring committee, he to select the other members, charged with making of arrangements for the season's runs, and for the trip of the local automobilists who are to take part in the St. Louis run in August.

TO SETTLE THE CHAUFFEUR QUESTION.

California Association of Chauffeurs Seeks Aid of Owners to Purge the Sport of Reckless and Dishonest Operators—Strict By-laws Govern.

Special Correspondence.

SAN FRANCISCO, May 17.—The officers of the recently formed California Association of Chauffeurs propose to keep a blacklist of drivers found guilty of the reckless operation of motor cars, and have circulated the following petition among the owners of automobiles in San Francisco:

"We, the undersigned, hereby petition your Association to expel any driver who, upon being tried by your examining board, is found guilty of reckless driving, either by excessive speed or improper handling of his machine, thereby endangering the lives of the occupants of said machine, or those upon the highways, and we hereby agree not to employ drivers who are expelled from your Association for the above causes."

The Association intends to gather into its ranks trustworthy drivers from among whom owners may select their chauffeurs, and to exercise watchfulness over its members, so that owners may be assured of the competence of their employees. The Association believes that it will thus be able to protect owners and the public generally from incompetent and reckless chauffeurs, if the employers will undertake to engage those drivers only who have a card of membership in the Association.

Though it is scarcely probable that every owner of an automobile will enter into this undertaking, the officers hope soon to establish such a degree of confidence in the minds of owners that most of them will insist on a chauffeur being a member of the organization, and will regard membership as a guaranty of competence and carefulness.

There has been considerable complaint here, as elsewhere, that drivers have an understanding with the dealers in supplies and with the repairmen and take care that cars find their way to the repair-shop at frequent periods. One of the by-laws of the California Association of Chauffeurs is directed against this, and reads as follows:

"Members of the C. A. C. shall at all times work for the best interests of their employers and protect them against any unnecessary expenditures or losses. In case of a breakdown which cannot be repaired on the spot, it will be the duty of any member of this Association in charge of such machine to notify his employer of the fact."

Other excellent by-laws read as follows:

"Any member of this Association found intoxicated while in charge of a machine shall, on being found guilty, be fined or expelled, as the Association may see fit."

"Any member of the Association found

guilty of dishonesty toward his employer, this Association, or its members, shall be expelled."

"Any member found guilty of using an automobile in a reckless manner, or of being responsible for the injury or destruction of a machine through carelessness, shall be fined, suspended or expelled, as the Association may see fit."

"Every member of the C. A. C. must undergo a strict examination as to knowledge of the car he is in charge of, and must carry a certificate of qualification, properly signed by the examining board and the President and Secretary of the Association."

The officers of the California Association of Chauffeurs are: S. D. Hewson, president; A. R. Newcomb, vice-president; F. J. Swentzel, secretary; T. P. Jarvis, treasurer; L. C. Luckey, constructor; C. M. Anderson, master-at-arms.

A committee of the Association, after investigation of the circumstances, has reported that an automobile accident that happened in Golden Gate Park on May 7, at night, was caused by racing. In attempting to pass the car ahead, the driver ran his machine up on a bank, overturning it and injuring three persons.

CHEAP RUBBER PROCESS.

Alkali Rubber Company, with \$1,000,000 Capital, will Erect Huge Plant.

Special Correspondence.

AKRON, May 21.—Considerable secrecy surrounds the names of the backers of the Alkali Rubber Company, incorporated here with \$1,000,000 capital stock, and also regarding the process that is expected to be used in treating the rubber. The articles of incorporation are signed by George G. Allen, Frank H. Watters, James W. Hofert, Harry Williams and Clara L. Smith, three of whom are attorneys. The real members of the company are said to be some of the best known rubber men and business men prominent in other lines.

The company is reported to have come into possession of some new process of treating rubber which is remarkably cheap. It is declared by those who are cognizant of the scope of the enterprise that the new concern will eclipse in magnitude any rubber enterprise in this city, and that it will have a very appreciable effect upon the tire trade. Work on the erection of a new factory to be located here is expected to be started in a few weeks, and it is said that the new company's goods will be in the market before the end of the summer.

POSTMASTER WYMAN, of St. Louis, has announced that in order to facilitate the collection and distribution of mail at the thirteen substations in the World's Fair grounds, an automobile service will be put into operation, the vehicles to make five trips daily.

QUARTER'S OUTPUT AGGREGATES \$3,329,058.

More than 2,500 Automobiles Built by Licensed Makers in First Three Months of 1904.—Detroit's Registered Owners Number 695.

Special Correspondence.

DETROIT, May 23.—From a reliable source of information in this city it is learned that the Association of Licensed Automobile Manufacturers of America turned out for the first quarter of 1904 more than 2,400 automobiles, with a total value of \$3,026,417. The companies in this association claim to manufacture fully 90 per cent. of all the automobiles made in the United States. Adding 10 per cent. to these figures, the total output of the country for the first quarter of the year will represent a value of \$3,329,058. The members of the association in Detroit alone turned out machines valued at \$860,800 for the first quarter.

WHITE GARAGE READY JUNE 1.

The new Detroit automobile garage and repair shop of the White Sewing Machine Co. will be ready for occupancy about June 1. It is located at 72 and 74 Farrar street and is now finished up to the second story. It will be a three-story brick building with paving brick front. It has a frontage of 45 feet and is 100 feet deep, having a floor space, including the three floors and a basement, of 18,000 square feet. The building is a model for its purposes. The ground floor will be used for storage. The sales and display rooms will be on the second floor. The big repair department will be located on the third floor and the washing and cleaning will be done in the basement. The building will be equipped with an electric lighting plant, elevators, hot and cold water, and all modern conveniences. The Luxfer system of lighting by prism windows will be used. The entire building is of slow burning construction. The location is near the heart of the city, only two blocks off the main street.

Work is progressing rapidly on the Cadillac automobile plant and the company is getting into better shape each day to fill the outstanding orders. President Clarence A. Black is authority for the statement that by the end of the present week the company will be turning out thirty machines a day.

695 CARS LICENSED IN DETROIT.

The Detroit *Free Press* has taken the sport up in earnest and for the last six months has been conducting a regular automobile department in its Sunday editions. Yesterday the paper published a list of all the licensed automobile owners of Detroit, giving their names, addresses, the names of their machines and the number of their license tags. The list took up nearly a whole page. The compilation showed that there are 695 licensed automobiles owned in the city and registered with the Police Department. Of these, the local makes, of course, predominate, the list including a large ma-

jority of Oldsmobiles, Cadillacs, Fords, Northernns and Packards. The Columbia, Elmore, White, Toledo, Peerless, Rambler, Autocar, Winton and Waverley all make good showings in the list. George L. Fleitz owns the only Darracq in the city. The Toledo car seems to be gaining in popularity this season and the Packard is coming into prominence fast.

Articles of incorporation of the Sommer Motor Co. with an authorized capital of \$40,000, have been filed with the county clerk. One-half of the capital has been paid in, \$5,000 being in cash and \$15,000 representing the machinery, stock, and other property of the Hammer-Sommer Auto Carriage Co., Ltd. The incorporators are Herman A. Sommer, William J. Sommer, Arthur Schreiter and Alex. J. Reno, all of Detroit.

BIG PASSENGER BREAK FOR FAIR.

A passenger automobile that is asserted to be the largest ever constructed has just been completed by the Electric Vehicle Company, of Hartford, for use at the World's Fair in St. Louis, where it will be one of the novelties of the summer. It is an electric sightseers' break, not unlike in general appearance those in use in New York and the one already in service in St. Louis, which was illustrated in THE AUTOMOBILE for May 14. The new vehicle, however, is 26 feet long and the floor is 7 feet 10 inches wide. It has eight transverse seats, furnishing seating capacity for fifty-eight persons. The vehicle weighs nearly six tons and has an underslung battery consisting of 44 cells of the largest size, furnishing power for twenty-five miles on one charge. The huge vehicle is driven by two 3.2-kilowatt electric motors, developing approximately $4\frac{1}{2}$ -horsepower each. The rear wheels are fitted with 7-inch solid rubber tires, while 6-inch tires are used on the front wheels. Incandescent light bulbs are fitted in the canopy top and there is also an electric conductor's signal and an electric alarm bell.

Other breaks of similar design are likely to be built for the same purpose, it is said.

AUTOS BURNED IN MILWAUKEE.

Special Correspondence.

MILWAUKEE, May 21.—The Jonas Automobile Company sustained a loss of about \$15,000, of which about \$9,000 is covered by insurance, as a result of a fire which broke out in the company's warehouse and that of the Standard Chemical Company at 725 National avenue, yesterday morning. Fourteen automobiles were destroyed, most of the machines having been received recently from the factory. The cars destroyed include one four-cylinder Pope-Toledo, one 16-horsepower Darracq, two Haynes-Appersons, two Searchmonts, one Winton, three Haase cars, one Spalding, one Milwaukee steamer, and several small runabouts. The building, a one and one-half story structure, was completely destroyed, but the loss on it will not exceed \$500.

NEW GARAGES AND IMPROVEMENTS

PORTLAND, Ore.—A large two-story brick building, now being erected on Seventh and Oak streets, will be occupied by Fred T. Merrill as an automobile salesroom, storage and repair station.

PORTLAND, Ore.—S. H. Barnard has moved into new quarters at 122 Grand avenue. The new storeroom is in the shape of an L, in one wing of which has been installed a complete vulcanizing outfit for repairing automobile tires.

CHATTANOOGA, Tenn.—Burke Bros. are building a new automobile station at the corner of A and Tenth streets. The building will be of brick, two stories in height, 85 by 42 feet.

INDIANAPOLIS.—The Capital Automobile Co., of Indianapolis, recently organized by C. R. Newby, has taken possession of the automobile storage and repair station on Ohio street. In addition to the storage and repair business, the company will sell automobiles.

PAWTUCKET, R. I.—The Pawtucket Automobile Co., W. H. Fuller, manager, has opened a garage and repair station, where vehicles may be stored by the day or month. Second-hand machines will also be bought and sold, and supplies and accessories furnished.

SAN FRANCISCO.—The West Coast Motor Car Co. has moved into its new quarters at 606 Van Ness avenue, where it has a well equipped establishment for the sale of Autocars and Columbias. Repair work will be done in a shop on the outside under the control of the company. The company reports that it cannot secure cars fast enough to supply the customers at its San Francisco and Los Angeles stores.

SAN JOSE, Cal.—George H. Osen & Co. have succeeded Osen & Hunt and will soon move into new quarters at 23 to 28 St. John street, where, besides conducting the agency for Winton, Stevens-Duryea and Oldsmobile, the firm will make a specialty of fine repair work, carry a full line of accessories and have ample storage room for customers' cars. The concern has just placed an order for sixteen Oldsmobiles with the Pioneer Automobile Co. of San Francisco.

SAN JOSE, Cal.—The Letcher Automobile Co., which has heretofore handled five or six different makes of automobiles, expects to represent to Cadillac exclusively during the present season. This company carries the largest stock of parts and supplies of any automobile repair shop on the Coast.

SAN FRANCISCO, May 16.—Fred A. Jacobs, proprietor of the Rambler Automobile agency, recently returned from the factory at Kenosha, Wis., where he spent several days endeavoring to secure more Rambler automobiles for this territory. Mr. Jacobs, assisted by F. J. Linz, sold and delivered thirty-nine Ramblers during the month of April, which it claims as Pacific coast record for sales. The Rambler Automobile Agency is located at 1331 Market street, where the shop and demonstrating rooms are

in charge of W. E. Saunders, who has been connected with all automobile races held on this coast during the last four years.

ALLENTOWN, Pa.—O. H. Dietrich & Co., Ltd., now occupy their new garage and salesrooms at 24-26 North Tenth street. The building, which is of brick, is two stories in height, 40 by 110 feet. The first floor front is of glass, affording an excellent showroom. The firm is agent for the Cadillac and Franklin automobiles.

CHICAGO.—Arrangements are being made for the opening about June 1 of the Moraine Hotel, at Highland Park. An automobile garage is being erected, and also a building for chauffeurs and attendants. The road approaching the hotel has been much improved.

BOSTON.—F. Carleton Doyle has opened a garage and salesroom in the Cyclorama Building.

PHILADELPHIA.—A modern garage and salesroom will be opened by Thomas Rose on North Broad street. Mr. Rose has secured the agency for the Haynes-Apperson cars and has placed an order for twenty of these machines.

SAN FRANCISCO.—The Pioneer Automobile Co. a few days ago received sample Oldsmobile tonneau. Since its arrival President E. P. Brinegar and the entire working force have been busy until midnight showing it to out-of-town agents and customers who have placed orders for this model. The company is expecting a carload of Stevens-Duryea machines, five of which have been sold. The Fresno Automobile Co. has been appointed agents at Fresno for the Stevens-Duryea cars.

RECENT INCORPORATIONS.

Indianapolis Automobile Racing Association, Indianapolis; capital \$1,000; to develop speed possibilities and advance the science of manufacturing motor cars and other vehicles for speed: Incorporators, James Allison, Frank B. Willis and Charles B. Sommers.

Orangeburg Automobile Co., Orangeburg, S. C.; capital, \$1,500. Officers, W. C. Wolfe, president; H. C. Wanamaker, vice-president, and W. D. Berry, secretary-treasurer.

Detroit Automobile Livery Co., Detroit; capital, \$10,000. Incorporators, Patrick O'Brien, William Nagel, William H. Mahs, Fred Mohn, and E. H. Schrieter, Jr.

Newport Amusement Association, Newport, R. I.; to build an amusement park at Newport, containing tracks for race horses and automobiles. Incorporators, Henry Bull, Jr.; Reginald Vanderbilt, Alfred G. Vanderbilt, Francis M. Ware, Henry F. Eldridge, L. B. Gergman, George P. Lawton, James S. Hazard, and Pemberton H. Powell.

ISAAC GUGGENHEIM, treasurer of the American Smelting and Refining Co., has sailed with his wife and daughter for Europe, where he expects to spend three or four months touring by auto in France, Switzerland, and the Austrian Tyrol.



R. A. Smythe has secured the agency for the Cadillac automobiles at Rock Island, Ill.

The Brennan Motor Co., of Syracuse, N. Y., has moved into its new three-story building.

The Pierce Motor Vehicle Co., of East Bound Brook, N. J., has filed certificate of dissolution.

Mayor Charles E. Jackson, of Rockford, Ill., has recently purchased a Pope-Waverley electric.

An automobile valued at \$850 will be the first prize in the annual cycle road race at Buffalo on Decoration Day.

The Schafer Hardware Co., of Decatur, Ill., have secured the agency for the Oldsmobile.

An automobile and carriage parade will be one of the principal features of the September floral fête at Saratoga Springs, N. Y.

Arthur H. Lowe, of the Governor's Council, at Fitchburg, Mass., has recently purchased a White steam tonneau with Sprague canopy top.

E. O. Abbott, formerly superintendent of the Cadillac factory at Detroit, has accepted the position of superintendent of the Jackson Automobile Co., of Jackson, Mich.

The Bates Automobile Co., of Lansing, Mich., has recently turned out its first perfected three-cylinder machine, and expects to have others ready for delivery in June.

John L. Dolson & Sons, automobile builders of Charlotte, Mich., have placed an agency for their cars with Walker & Dam, 20 West Sixtieth street, New York.

Eddie Bald, the former cycling champion, will make his debut as a racing chauffeur at the meet to be held in Hartford, Conn., on Decoration Day.

Thomas Hartley, of Pittsburg, Pa., has been granted a permit for the erection of a two-story brick automobile stable on Fifth avenue, at a cost of \$5,000.

The Alexander Iron Works, of Syracuse, is building some new motors of two and four cylinders after the designs of Moreland & Mosely, of Rochester.

The Royal Automobile Co. has established an office at 425 Wabash avenue, Chicago, with G. H. Tomlinson as manager. The company expects to build about 400 cars this year.

The W. K. Prudden Co., representatives for the Olds Motor Works at Lansing, Mich., have ordered fourteen machines, four of which have been sold for use by the Michigan Millers' Mutual Fire Insurance Co.

A company is being formed at Detroit by John H. Avery for the manufacture of auto-

mobile springs, together with iron and steel specialties. The company will occupy a building adjoining that of the Reliance Automobile Co.

A 24-30 horsepower F. I. A. T. car ordered by W. Gould Brokaw is being especially built for him, and will be finished entirely in white, the body being made of white Cape Cod wood and upholstered in white enameled leather.

A. R. Demory, formerly superintendent of the Snell Cycle Fittings Co., of Toledo, is now representing the Timken Roller Bearing Axle Co., of Canton, O., and is calling upon the automobile manufacturers in the interests of his new employer.

The death of Harry R. Geer, the motorcycle dealer of St. Louis, occurred Sunday, May 22, after a brief illness. The funeral was held Wednesday. Mr. Geer was well known as a veteran bicycle dealer, not only in this city, but generally in the West.

A Philadelphia company, of which Randolph E. Sweeney is president, has purchased a site at McKeesport, Pa., on which it will construct a factory for the manufacture of automobiles. Work on the new factory will be commenced in a few days.

In order to discourage the use of machines of abnormal power, the National Federation of American Motorcyclists has restricted the entries for the hill-climbing contest at Fort George, on Decoration Day, to cycles of not more than 3½-horsepower.

Charles Gray, of the Chicago *Inter Ocean*, a prominent member of the Chicago Automobile Club, has purchased a four-cylinder Royal touring car, and is preparing for a Chicago-New York run, with the hope of lowering Bert Holcomb's record between the two cities.

John T. Fisher, the well-known cyclist, is now receiving a course of instructions at the factory of the Pope Mfg. Co. at Toledo, preparatory to an automobile racing career, having been engaged to drive the 60 horsepower racer of Orlando Weber of Chicago and Milwaukee.

Representative Scovel, of Camden, N. J., father of the Scovel anti-automobile bill which was superseded by the present law, was seen on "Automobile Row," in Philadelphia, a few days ago studying designs and comparing prices with the avowed intention of "becoming a purchaser."

C. A. Coey & Co., 5311 Cottage Grove avenue, Chicago, western agents for the Thomas cars, have sold twenty-four Thomas machines this year. In connection with their agency business, they are now running regular automobile excursions through Jackson and Washington parks and conducting a general automobile livery.

In the recent tests of commercial vehicles, held in London under the auspices of the Automobile Club of Great Britain and Ireland, first and second prizes were awarded to two White steam delivery vans made by the White Sewing Machine Co., for Liberty & Co., of Regent street, N. W., London.

The San Francisco branch store and repair shop of the Diamond Rubber Co. has been removed from 8 Beale street to larger quarters at 608 Mission street. The company reports a prosperous business on the Pacific Coast, where Diamond tires have been thoroughly introduced during the last few years.

The agency for the Knox cars in Oakland, Cal., has been taken by the firm of Leavitt & Bill, well-known bicycle dealers, which conducts stores in San Francisco, Oakland, Los Angeles and San Jose. The Oakland house, under the management of H. H. Kent, carries a full line of accessories and supplies.

In its experiments with automobiles in the rural districts, the French Postal Service has been enabled to make two deliveries daily, whereas only one could be made with the horsedrawn vehicles. This makes practically certain the adoption of the automobile for use on the various rural postal routes of France.

Carl Fisher's Mohawk racer, which was wrecked on the Zanesville, O., track last season, has been thoroughly overhauled and is again in commission for this season's races. It has been given several workouts recently, and was found in good working order. It will make its first public appearance this year in the races at the fair grounds in Indianapolis on Decoration Day.

Alfred I. Du Pont, of Wilmington, Del., has been made defendant in a suit for \$20,000 damages instituted by Mrs. Sidney L. Heidelbaugh, near that city, who alleges that she was injured by being thrown from the seat of her market wagon one day last fall as the result of the horse she was driving becoming frightened at an automobile owned by the defendant. The suit will probably come to trial at the May term of court, which began last week.

John S. Johnson, the former cyclist and skating champion, of Minneapolis, has entered the automobile field. For five years he was employed in a local furniture store, but has now accepted a position with A. C. Bennett, the local Winton agent. Mr. Bennett expects that Johnson's bicycle experience will be of great value in developing him into a fast driver, and hopes to have *Bullet No. 2* in the automobile races to be held in Minneapolis during the State Fair, with Johnson at the wheel.

